**The main enhancements to XTEL-DOC TXT L DCT V5 over the previous version, XTEL-DOC TXT L DCT V42 comprise:**

### Support for the documentation produced by new X-TEL V5 functions

XTEL-DOC V5 supports new X-TEL and MINI X-TEL V5 functions for creating the application documentation file:

- PL7-PMS2: for implementing and using a complete library of process control application algorithms and their related calculations along with the man-machine interface for PMX7 V5 process control PLCs,
- XBTL940: for implementing and using an XBT operator console,
- XTEL-CONF: for creating the local rack and remote I/O configuration and generating the application structure for TSX/PMXV5 PLCs,
- XTEL-SDBASE: to manage the symbol data base,
- XTEL-MOD: to manage the module data base.

### Compatibility with installed systems

TXT L DCT V5 software can only be installed on an X-TEL or MINI X-TEL V5 system. XTEL-DOC V5 can:

- Read a documentation file generated by XTEL-DOC V4 or V42,
- Regenerate a documentation file created by XTEL-DOC V4 or V42,
- Generate a file from the documentation files generated by V4 or V42 level applications.

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1.2 XTEL-DOC Program Features
1.3 Print-out Examples

**2 Building and Generating Documentation Files with XTEL-DOC**

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2.2 Generating .DOC Files with PL7 Functions and X-TEL Tools
2.3 Integrating and Managing Documentation Files in XTEL-DOC

**3 XTEL-DOC Operating Modes**

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| | 1.2-5 Printing the Documentation File | 1/5 |
| **1.3** | **Print-out Examples** | **1/6** |

This section ends on page 1/16


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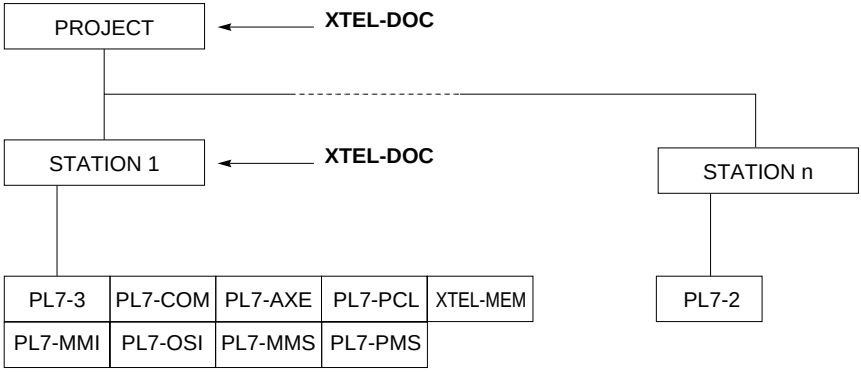
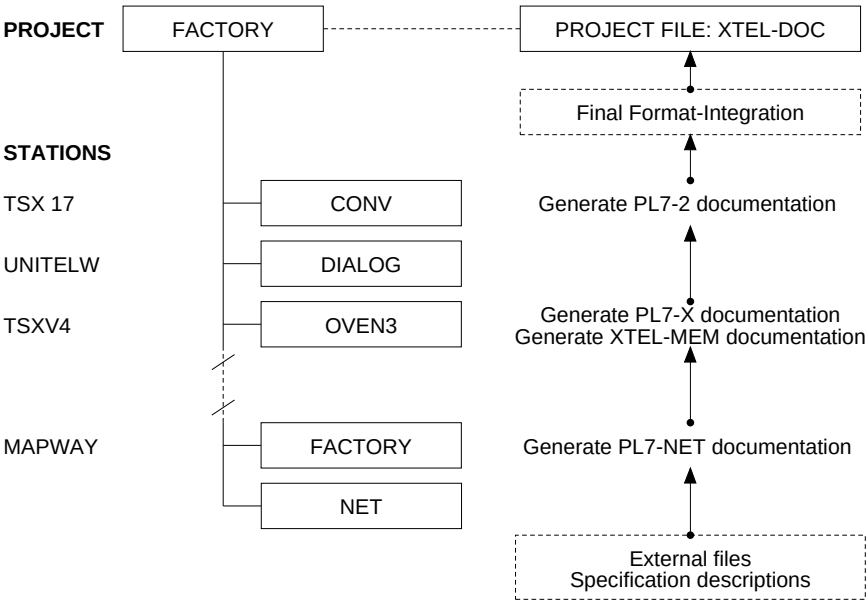
## 1.1 Presentation

### 1.1-1 Program Presentation

XTEL-DOC is an optional X-TEL Software Workshop program. It is used to manage the application documentation file, in single and multiple station applications.
This program can be accessed at two levels:




The XTEL-DOC program is based on the various documentation files generated by the PL7-X specialized function programs and the station tools.
XTEL-DOC, will also integrate imported ASCII, semi-graphic or Postscript files in order to generate a coherent and complete A4 or A3 format documentation file.




F

### 1.1-2 Building Application Documentation Files

The documentation file generated by XTEL-DOC can be:

**Printed**, it is generated in landscape (horizontal) format and can be printed-out in A4 or A3 size, depending on the ability of the connected Postscript printer:

- Configuration and program are condensed,
- Each page is split into two A5 format sheets and includes a footer,
- A single page combines a number of contact networks,
- The Grafcet framework, transitions and associated actions are displayed on the same pages.

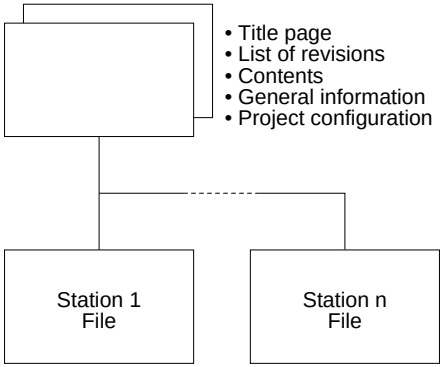
**Accessed** on line:

- Paragraph selection, browsing the pages,
- Automatic updating of revisions and changes,
- Zoom on part of the displayed window.

XTEL-DOC can generate two types of documentation file laid out in sections and paragraphs:

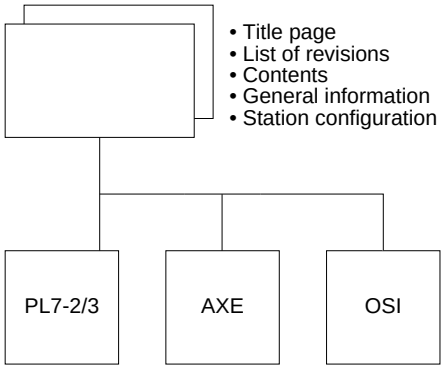
**Project file**, comprising:

- A title page,
- A list of revisions,
- A table of contents,
- General information,
- The project configuration,
- The station files (station files must be generated at individual station level).




**Station file**, comprising:

- A title page,
- A list of revisions,
- A table of contents,
- General information,
- The station configuration,
- The PL7 program,
- The axis control program,
- The communication program,
- The process control program,
- The man-machine interface program,
- The network program.

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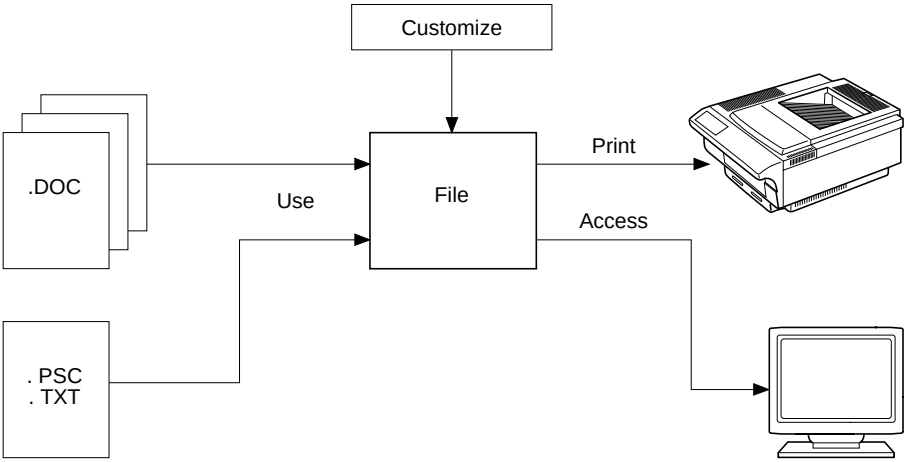
## 1.2 XTEL-DOC Program Features

### 1.2-1 Basic Functions




### 1.2-2 Customizing the Documentation File

XTEL-DOC lets the user enter the following documentation file components:

- Documentation file contents,
- The footer to placed at the bottom of each page,
- Title page,
- General information pages using the OS/2 text editor.

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### 1.2-3 Using Documentation Files Generated by other Programs

XTEL-DOC **allows** the user to build the application documentation file from .DOC files generated by specialized application programs or by standard X-TEL tools.

XTEL-MEM TSX/PMX V4 station configuration,
XTEL-CONF TSX/PMX V5 station configuration,
XTEL-SDBASE Symbol data base management,
XTEL-MOD Program module management,
PL7-NET Project configuration,
PL7-2 PL7-2 program documentation file,
PL7-3 PL7-3 program documentation file,
PL7-AXE Axis control program,
PL7-COM Communication program,
PL7-PCL TSX process control program,
PL7-PMS PMX process control program,
PL7-PMS2 PMX process control program,
PL7-MMI Man-Machine Interface program,
PL7-OSI OSI network program,
PL7-MMS MMS program and symbols,
XBTL940 XBT terminal configuration.

XTEL-DOC Also supports the integration of text, Postscript or Encapsulated Postscript files generated by other programs and accepted as general information.

### 1.2-4 Accessing the Documentation File

XTEL-DOC displays the contents of the application documentation file on-screen.

The documentation file can therefore be accessed on-line:

- For application debug operations (access to cross-references and to the table of symbols, etc.),
- For maintenance operations (configuration display, general information, etc.).

XTEL-DOC provides fast access via the table of contents. XTEL-DOC provides an overall view (displaying a chart with actions and associated conditions) or a detailed view (Zoom function).

### 1.2-5 Printing the Documentation File

XTEL-DOC can print-out all or part of the documentation file (a single section, a single paragraph or a part of a paragraph) to a Postscript laser printer.

XTEL-DOC manages the different versions of the application file.

## 1.3 Print-out Examples

### Title Page




F

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 01 | 02 | | | | | | | |
| 1 | Title Page | 01 | 02 | | | | | | | |
| 2 | List of Revisions | 01 | 02 | | | | | | | |
| 3 | Contents | 01 | 02 | | | | | | | |
| 4 | General Information | 01 | 01 | | | | | | | |
| 5 | Station Configuration | 01 | 01 | | | | | | | |
| 5.1 | Configuration header | 01 | 01 | | | | | | | |
| 5.2 | I/O configuration | 01 | 01 | | | | | | | |
| 5.3 | I/O wiring | 01 | 01 | | | | | | | |
| 5.4 | Mnemonics | 01 | 01 | | | | | | | |
| 6 | PL7 functions | 01 | 01 | | | | | | | |
| 6.1 | General information | 01 | 01 | | | | | | | |
| 6.2 | Software configuration | 01 | 01 | | | | | | | |
| 6.3 | Functions blocks | 01 | 01 | | | | | | | |
| 6.4 | Configuration of OFBs | 01 | 01 | | | | | | | |
| 6.5 | Constant words | 01 | 01 | | | | | | | |
| 6.6 | Network information | 01 | 01 | | | | | | | |
| 6.7 | Program | ** | 01 | | | | | | | |
| 6.8 | Program structure | ** | 01 | | | | | | | |
| 6.9 | Grafcet structure | ** | 01 | | | | | | | |
| 6.10 | Xref by variable | ** | ** | | | | | | | |
| 6.11 | Xref by mnemonics | ** | ** | | | | | | | |
| 6.12 | Xref program | ** | ** | | | | | | | |
| 6.13 | Occupation grid | ** | ** | | | | | | | |

| Revision | Date | Author | Comment |
|---|---|---|---|
| 01 | 11/21/90 | xtel | |
| 02 | 11/21/90 | xtel | |

| | | |
|---|---|---|
| 1 | Title Page | 1 p |
| 2 | List of Revisions | 1 p |
| 3 | Contents | 1 p |
| 4 | General Information | 0 p |
| 5 | Station Configuration | |
| 5.1 | Configuration header | 1 p |
| 5.2 | I/O configuration | 1 p |
| 5.3 | I/O wiring | 4 p |
| 5.4 | Mnemonics | 11 p |
| 6 | PL7 functions | |
| 6.1 | General information | 4 p |
| 6.2 | Software configuration | 2 p |
| 6.3 | Functions blocks | 3 p |
| 6.4 | Configurations of OFBs | 0 p |
| 6.5 | Constant words | 1 p |
| 6.6 | Network information | 0 p |
| 6.7 | Program | |
| 6.8 | Program structure | |
| 6.9 | Grafcet structure | |
| 6.10 | Xref by variable | |
| 6.11 | Xref by mnemonics | |
| 6.12 | Xref program | |
| 6.13 | Occupation grid | |

| INTERNAL BITS | |
|---|---|
| VARIABLE | COMMENT |
| B0 | RESUME |
| B1 | AUX. GRAFCET INITIALIZATION |
| B2 | PLC I/O FAULT |
| B3 | CHECK GRIDING WHEEL ROTATION |
| B4 | GRIDING WHEEL ROTATION FAULT |
| B5 | LUBRICATION FAULT |
| B6 | SENSOR FAULT |
| B8 | ROLLER MOTER TEMP. SENSOR FAULT |
| B10 | LUBRICATION LEVEL FAULT |
| B11 | GENERAL FAULT |
| B12 | MOTION CONTROL |
| B13 | DIAMOND TRAVEL ERROR |
| B14 | POSITION ERROR |
| B15 | AUX. RESET CYCLE SELECTION |
| B27 | AUX. CYCLE CONDITIONS |
| B28 | AUTOMATIC CYCLE CONDITIONS |
| B30 | AUX. MULTIPLEXER |
| B31 | AUX. MULTIPLEXER |
| B32 | AUX. MULTIPLEXER |
| B33 | AUX. MULTIPLEXER |
| B34 | AUX. MULTIPLEXER |
| B35 | AUX. MULTIPLEXER |
| B36 | AUX. MULTIPLEXER |
| B41 | AUX. PB START CYCLE |
| B42 | AUX. PB DIAMOND LOAD |
| B43 | AUX. PB STOP GRINDER |
| B44 | AUX. PB START GRINDER |
| B45 | AUX. PB STOP ROLLER |
| B46 | AUX. PB START ROLLER |
| B48 | AUX. PB PULSE REV. DIAMOND |
| B49 | AUX. PB PULSE FWD. DIAMOND |
| B50 | AUX. PB FAST REV. DIAMOND |
| B51 | AUX. PB FAST FWD. DIAMOND |
| B52 | AUX. PB RETURN DIAMOND ← |
| B53 | AUX. PB ADVANCE DIAMOND → |
| B55 | AUX. PB RETURN DIAMOND (RUN) |
| B56 | AUX. PB ADVANCE DIAMOND (RUN) |
| B57 | AUX. PB PULSE FWD. DIAMOND (0.01) |
| B58 | AUX. PB PULSE REV. DIAMOND (0.01) |
| B59 | AUX. PB PULSE FWD. DIAMOND (0.001) |
| B60 | AUX. PB PULSE REV. DIAMOND (0.001) |
| B61 | AUX. PB FWD. DIAMOND AND ROLLER |
| B62 | AUX. PB ADVANCE ROLLER (RUN) |
| B63 | AUX. PB RETURN ROLLER (RUN) |
| B64 | AUX. PB PULSE FWD. ROLLER (0.01) |
| B65 | AUX. PB PULSE REV. ROLLER (0.01) |
| B66 | AUX. PB PULSE FWD. ROLLER (0.001) |
| B67 | AUX. PB PULSE REV. ROLLER (0.001) |
| B68 | AUX. RETURN DIAMOND AND ROLLER |
| B69 | RESUME STORE RTA1 |

| INTERNAL BITS | |
|---|---|
| VARIABLE | COMMENT |
| B70 | RESUME STORE RTA2 |
| B71 | TRANSFERT OUTPUT WORDS |
| B72 | TRANSFERT OUTPUT WORDS |
| B73 | TRANSFERT OUTPUT WORDS |
| B74 | TRANSFERT OUTPUT WORDS |
| B75 | TRANSFERT OUTPUT WORDS |
| B76 | TRANSFERT OUTPUT WORDS |
| B77 | TRANSFERT OUTPUT WORDS |
| B78 | TRANSFERT OUTPUT WORDS |
| B79 | TRANSFERT OUTPUT WORDS |
| B80 | TRANSFERT OUTPUT WORDS |
| B81 | AUX. SHIFT |
| B82 | AUX. SHIFT |
| B83 | AUX. SHIFT |
| B84 | AUX. SHIFT |
| B85 | AUX. STORE RTA1 |
| B86 | AUX. STORE RTA2 |
| B87 | AUX. COND. PB DIAMOND FWD. (RUN) |
| B88 | AUX. COND. PB DIAMOND REV. (RUN) |
| B89 | AUX. CORRECT POSITION ERROR |
| B91 | COMPUTE GRINDER STAR-TRIANGLE |
| B92 | AUX. INTERVAL DIAMOND LOAD |
| B93 | INTERVAL DIAMOND LOAD (T2-DONE) |
| B94 | AUX. DRAIN MACHINE |
| B95 | AUX. DRAIN MACHINE (T2-DONE) |
| B96 | COUNT PASSES |
| B97 | COUNT DONE |
| B98 | ANTI-REPETITION START INDEX RTA1 |
| B99 | ANTI-REPETITION START INDEX RTA2 |
| B100 | AUX. PB START CYCLE |
| B101 | AUX. PB DIAMOND LOAD |
| B102 | AUX. PB START GRINDER |
| B103 | AUX. PB START ROLLER |
| B104 | AUX. PB PULSE REV. DIAMOND |
| B105 | AUX. PB PULSE FWD. DIAMOND |
| B106 | AUX. PB RETURN DIAMOND ← |
| B107 | AUX. PB ADVANCE DIAMOND → |
| B109 | LUBRICATION SETUP |
| B110 | AUX. SHIFT |
| B111 | AUX. SHIFT |
| B112 | AUX. SHIFT |
| B113 | AUX. ROLLER EMERGENCY |
| B114 | ROLLER BACK OFF |
| B115 | AUX. ROLLER EMERGENCY |
| B116 | AUX. SHIFT |
| B120 | AUTOMATIC CYCLE |
| B123 | RESUME DIAMOND COMMANDS |
| B130 | AUX. TRANSFERT OUTPUT WORDS |
| B131 | AUX. STORE RTA1-2 UNITS |
| B132 | AUX. STORE RTA1-2 HUNDREDS |
| B133 | AUX. GRAFCET PGM. RTA1-2 |

| | | | |
|---|---|---|---|
| | Station conf2_3 | | File Rev. : 01 |
| | | | Paragraph Rev. : 01 |
| TSX 27 47 | General Information | VMK | Author : xtel |
| | | | Date : 11/08/90 |
| Trial | Customer Application | F. LE ROY | Page : 6.1-1 |

| | | |
|---|---|---|
| | Station n126s2 | File Rev. : 03 |
| | | Paragraph Rev. : 03 |
| | General Information | Author : xtel |
| | | Date : 11/29/90 |
| | | Page : 4-1 |

| VARIABLE | MNEMONIC | COMMENT |
|---|---|---|
| 12,0 | Sb20 | EMERGENCY STOP |
| 12,1 | Sa21 | SELECT : 0 END CYCLE/ 1 CONTINUOUS |
| 12,2 | Sa22 | SELECT MANUAL MODE |
| 12,3 | Sa23 | SELECT AUTOMATIC MODE |
| 12,4 | Sb24 | PB HOIST |
| 12,5 | Sb25 | PB START HOOK |
| 12,6 | Sb26 | PB STOP HOOK |
| 12,7 | Sa27 | SELECT TRANSFER PART : 0 FWD./ 1 REV. |
| 12,8 | Sb28 | PB UP MEASUREMENT |
| 12,9 | Sb29 | PB DOWN MEASUREMENT |
| 12,A | Sb2a | PB START CYCLE |
| 12,B | Sa2b | SELECT BRAKING : 0 YES/ 1 NO |
| 12,C | Ka2c | BRAKE RELEASED |
| 12,D | Xx2d | |
| 12,E | Xx2e | |
| 12,F | Xx2f | |
| 13,0 | Sq30 | EJECT BAD PART |
| 13,1 | Sq31 | EJECT GOOD PART |
| 13,2 | Sq32 | PART IN HOIST |
| 13,3 | Sq33 | PART READY TO TRANSFER |

| VARIABLE | MNEMONIC | COMMENT |
|---|---|---|
| 13,4 | Sq34 | PART READY FOR MEASUREMENT |
| 13,5 | Sq35 | TRANSFER REV. |
| 13,6 | Sq36 | TRANSFER FWD. |
| 13,7 | Sq37 | MEASUREMENT UP |
| 13,8 | Sq38 | MEASUREMENT DOWN |
| 13,9 | Sq39 | REV. EXIT HATCH |
| 13,A | Sq3a | FWD. EXIT HATCH |
| 13,B | Sq3b | HOIST UP |
| 13,C | Sq3c | HOIST DOWN |
| 13,D | Sq3d | CHECK HOOK ROTATION |
| 13,E | Xx3e | |
| 13,F | Xx3f | |
| 14,0 | Xx40 | |
| 14,1 | Xx41 | |
| 14,2 | Xx42 | |
| 14,3 | Xx43 | |
| 14,4 | Ka44 | CONT. MEASUREMENT BAD - |
| 14,5 | Ka45 | CONT. MEASUREMENT OK |
| 14,6 | Ka46 | CONT. MEASUREMENT BAD + |
| 14,7 | Xx47 | |

| VARIABLE | MNEMONIC | COMMENT |
|---|---|---|
| 14,8 | Ka48 | CONT. UNDER POWER |
| 14,9 | Ka49 | CONT. ADJUST |
| 14,A | Ka4a | CONT. MEASUREMENT DONE |
| 14,B | Ka4b | CONT. AUTOMATIC |
| 14,C | Ka4c | CONT. CALIBRATION |
| 14,D | Ka4d | CONT. BAD CALIBRATION |
| 14,E | Ka4e | |
| 14,F | Ka4f | |
| 05,0 | Km50 | ROTATE HOOK |
| 05,1 | Km51 | RELEASE HOOK BRAKE |
| 05,2 | Xx52 | |
| 05,3 | Yv53 | RAISE HOIST |
| 05,4 | Yv54 | FWD. TRANSFER |
| 05,5 | Yv55 | RAISE MEASUREMENT |
| 05,6 | Yv56 | LOWER MEASUREMENT |
| 05,7 | Yv57 | CLOSE EXIT HATCH |
| 05,8 | Xx58 | |
| 05,9 | Xx59 | |
| 05,A | Xx5a | |
| 05,B | Xx5b | |

| VARIABLE | MNEMONIC | COMMENT |
|---|---|---|
| 05,C | Hl5c | CCG20 AUTOMATIC OPERATION |
| 05,D | Hl5d | CHOKE |
| 05,E | Hl5e | SERIOUS PROBLEM |
| 05,F | Xx5f | |
| 06,0 | Hl60 | INITIAL STEP |
| 06,1 | Hl61 | MEASUREMENT |
| 06,2 | Hl62 | NO PART |
| 06,3 | Hl63 | CHOKE |
| 06,4 | Hl64 | SENSOR ERROR |
| 06,5 | Hl65 | CYCLE ERROR |
| 06,6 | Hl66 | BAD CALIBRATION |
| 06,7 | Xx67 | |
| 06,8 | Xx68 | |
| 06,9 | Xx69 | |
| 06,A | Xx6a | |
| 06,B | Xx6b | |
| 06,C | Ka6c | MEASUREMENT ORDER |
| 06,D | Ka6d | CALIBRATION ORDER |
| 06,E | Ka6e | AUTOMATIC ORDER |
| 06,F | Xx6f | |

| | | | |
|---|---|---|---|
| | Station conf2_4 | | File Rev. : 01 |
| | | | Paragraph Rev. : 01 |
| TSX 27 47 | List of Mnemonics | VMK | Author : xtel |
| | | | Date : 11/07/90 |
| Trial | Customer Application | F. LE ROY | Page : 5.4-1 |

Rack 0 Module : Code : 56
Mod 2
Task : MAST

| Wire | Ter.Blk. | I/O bit | Mnemonic | Comment |
|---|---|---|---|---|
| | BLK7 | | | |
| 101 | 1 | | | |
| | 2 | | | |
| 12,0 | 3 | 12,0 | | MULTIPLEXER - COL. 1 |
| 12,1 | 4 | 12,1 | | MULTIPLEXER - COL. 2 |
| 12,2 | 5 | 12,2 | | MULTIPLEXER - COL. 3 |
| 12,3 | 6 | 12,3 | | MULTIPLEXER - COL. 4 |
| 12,4 | 7 | 12,4 | | MULTIPLEXER - COL. 5 |
| 12,5 | 8 | 12,5 | | MULTIPLEXER - COL. 6 |
| 12,6 | 9 | 12,6 | | MULTIPLEXER - COL. 7 |
| 12,7 | 10 | 12,7 | | ROLLER MOTOR TEMP. SENSOR |
| 12,8 | 11 | 12,8 | | THERMAL CUTOFF TRIGGERED |
| 12,9 | 12 | 12,9 | | LOW OIL LEVEL |
| 12,A | 13 | 12,A | | OIL FILTER BLOCKED |
| 12,B | 14 | 12,B | | OIL OVERHEAT |
| 12,C | 15 | 12,C | | READY TO START ROLLER |
| 12,D | 16 | 12,D | | HOOK OIL SUPPLY |
| 12,E | 17 | 12,E | | AXIS BOARD OK |
| 12,F | 18 | 12,F | | GRINDER TURNING |
| I12,0 | 19 | I12,0 | | POS - PART OK |
| I12,1 | 20 | I12,1 | | DIAMOND FWD. |
| I12,2 | 21 | I12,2 | | DIAMOND REV. |
| I12,3 | 22 | I12,3 | | DIAMOND REV. OVERRUN |
| I12,4 | 23 | I12,4 | | DIAMOND FWD. OVERRUN |
| I12,5 | 24 | I12,5 | | NO PART SUPPLY |
| I12,6 | 25 | I12,6 | | CHOKE |
| I12,7 | 26 | I12,7 | | NO PART |
| I12,8 | 27 | I12,8 | | LUBRICATED |
| I12,9 | 28 | I12,9 | | POS - PRE-TRAVEL NEG. |
| I12,A | 29 | I12,A | | POS - PRE-TRAVEL POS. |
| I12,B | 30 | I12,B | | POS - DEVIATION NEG. |
| I12,C | 31 | I12,C | | POS - DEVIATION POS. |
| I12,D | 32 | I12,D | | RTA1 NOT EXECUTED |
| I12,E | 33 | I12,E | | RTA2 NOT EXECUTED |
| I12,F | 34 | I12,F | | ROLLER EMERGENCY |
| | 35 | | | |
| 100 | 36 | 100 | | |

Rack 0 Module : Code : 56
Mod 3
Task : MAST

| Wire | Ter.Blk. | I/O bit | Mnemonic | Comment |
|---|---|---|---|---|
| | BLK7 | | | |
| 101 | 1 | | | |
| | 2 | | | |
| I3,0 | 3 | I3,0 | | SUPPLY YES |
| I3,1 | 4 | I3,1 | | GRINDER RUNNING STAR |
| I3,2 | 5 | I3,2 | | GRINDER RUNNING TRIANGLE |
| I3,3 | 6 | I3,3 | | PART INSERT YES |
| I3,4 | 7 | I3,4 | | AUTOMATIC CONTROL |
| I3,5 | 8 | I3,5 | | MANUAL CONTROL |
| I3,6 | 9 | I3,6 | | LUBRICATE DIAMOND |
| I3,7 | 10 | I3,7 | | CONTINUOUS REPLACE YES |
| I3,8 | 11 | I3,8 | | RESTART AFTER REPLACE YES |
| I3,9 | 12 | I3,9 | | RESTART AFTER REPLACE NO |
| I3,A | 13 | I3,A | | MANUAL SELECTOR NO |
| I3,B | 14 | I3,B | | MANUAL SELECTOR YES |
| I3,C | 15 | I3,C | | ALTERNATE REPLACE |
| I3,D | 16 | I3,D | | SELECTORS CLOSED |
| I3,E | 17 | I3,E | | PUMP MOTOR BACK-UPS |
| I3,F | 18 | I3,F | | ROLLER STATUS |
| I13,0 | 19 | | | OIL LEVEL |
| | 20 | | | |
| | 21 | | | |
| | 22 | | | |
| | 23 | | | |
| | 24 | | | |
| | 25 | | | |
| | 26 | | | |
| I13,8 | 27 | I13,8 | | REPLACE YES |
| | 28 | | | |
| | 29 | | | |
| | 30 | | | |
| | 31 | | | |
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| | 33 | | | |
| | 34 | | | |
| | 35 | | | |
| 100 | 36 | | | |

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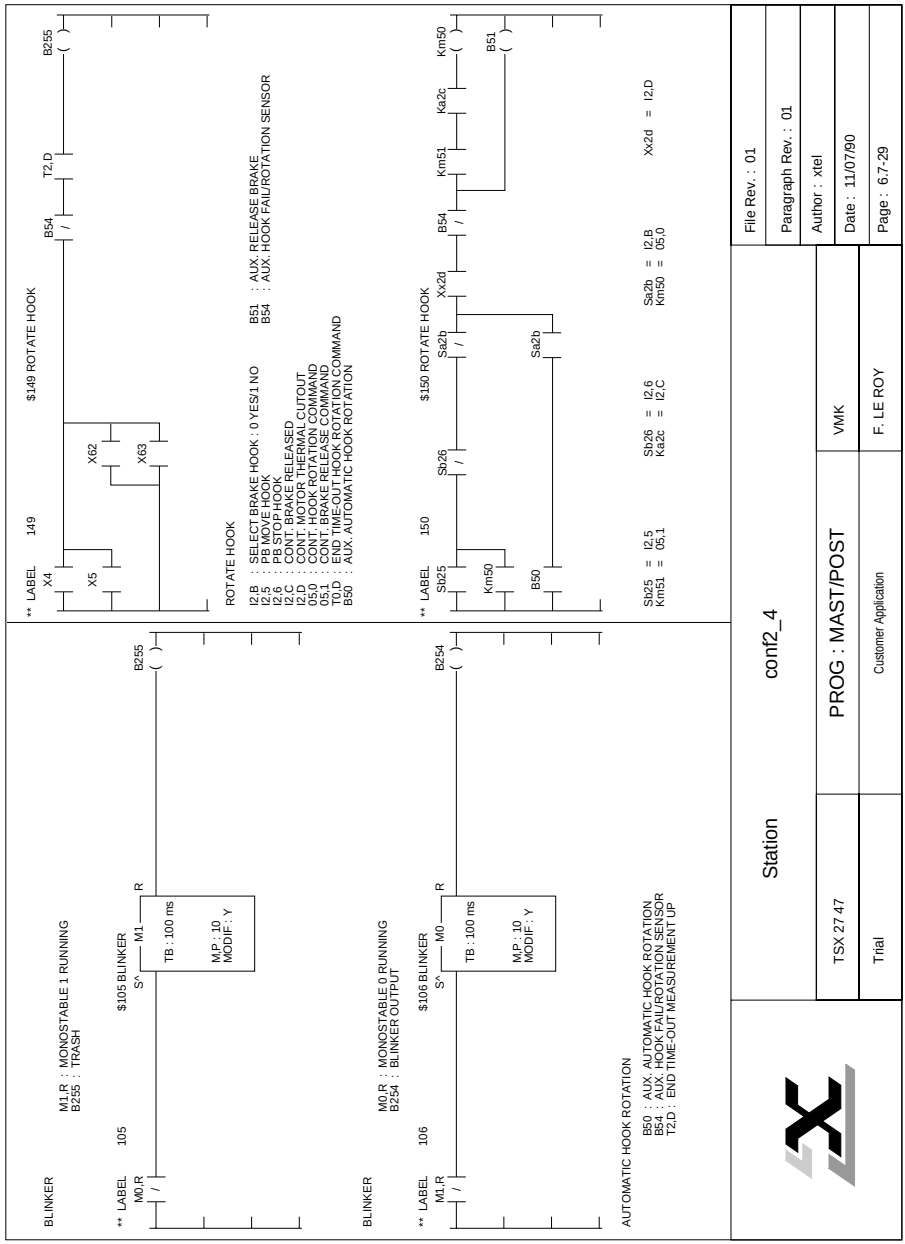
|---|---|---|---|
| | Station conf2_4 | | File Rev. : 01 |
| | | | Paragraph Rev. : 01 |
| TSX 27 47 | I/O WIRING | VMK | Author : xtel |
| | | | Date : 11/08/90 |
| Trial | Customer Application | F. LE ROY | Page : 5.3-2 |

## Cross References

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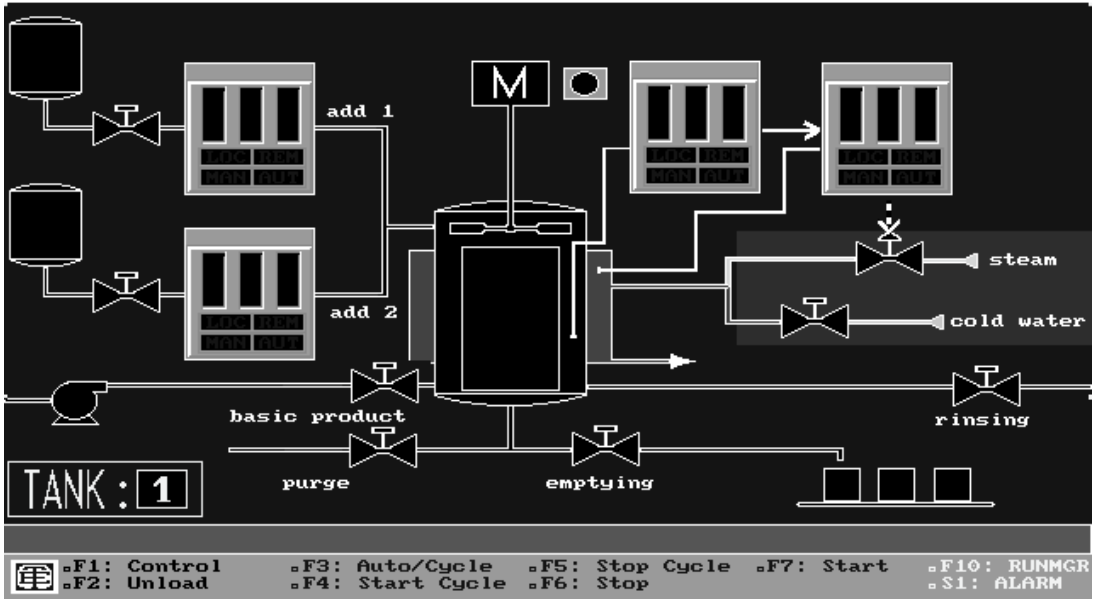


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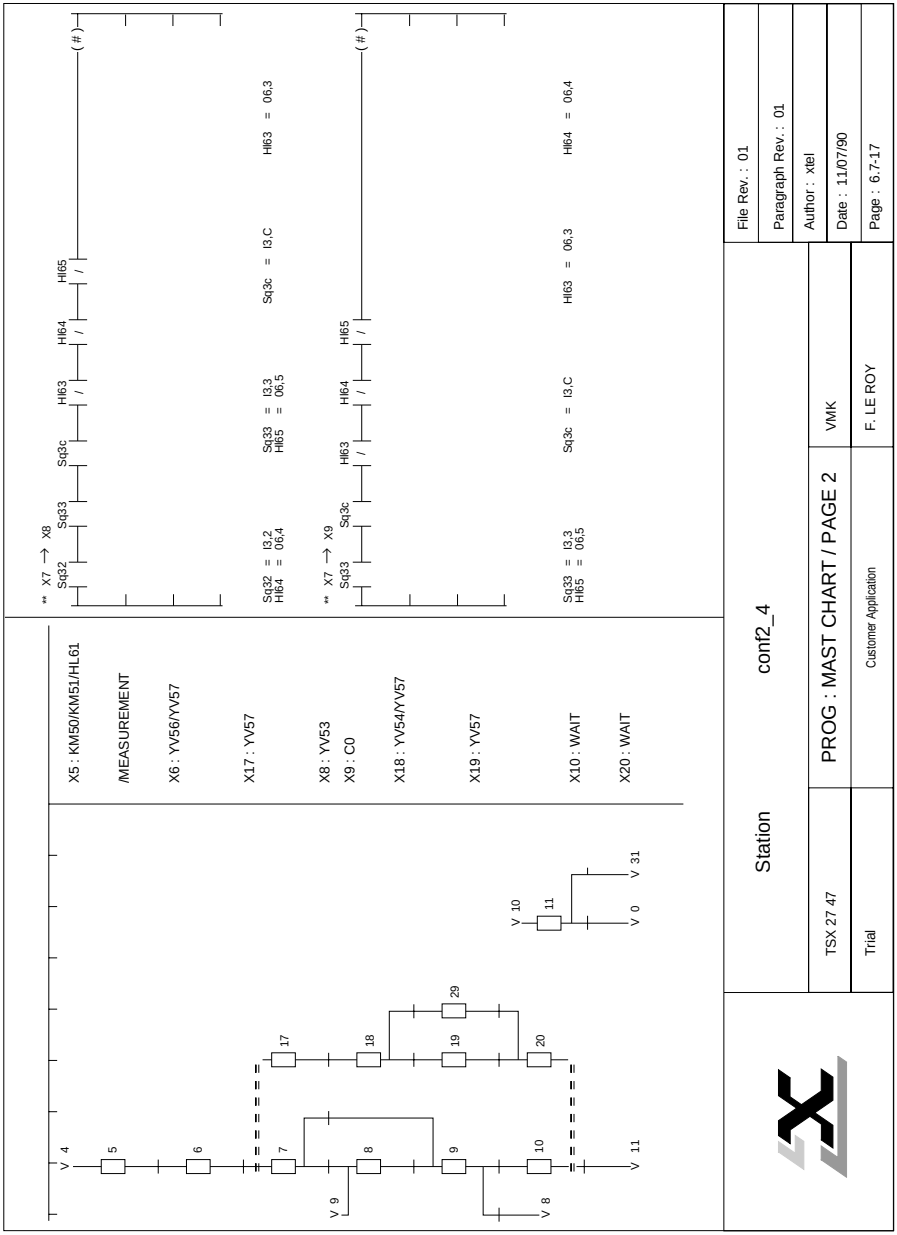
|---|---|---|---|
| | Station st_eng | | File Revision: 03 |
| | | | Paragraph Revision: 01 |
| | TSX 7 | M.K.V | Author: BROWN |
| | PCM_4 : SCREEN MENU | | Date: 23/11/92 |
| | Trial / Documentation | N° : 1206228 91 45 | Page: 11.2-3 |

## PL7-MMI Man-Machine Interface

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BITS

| MNEMONIC | VARIABLE | TASK | LABEL | SYMBOL |
|---|---|---|---|---|
| HI66 | 0,6 | POST | p162 | - \| \| - |
| | | POST | p163 | - \| / \| - |
| | | POST | p164 | - \| \| - |
| | | POST | p176 | - \( \) - |
| | | CHART | X0 → X3 1/2 /2 | - \| / \| - |
| | | CHART | X0 → X1 1/2 /1 | - \| / \| - |
| Ka2c | I2,C | POST | p150 | - \| \| - |
| Ka44 | I4,4 | PRL | p11 | - \| / \| - |
| | | PRL | p30 | - \| / \| - |
| | | PRL | p35 | - \| \| - |
| | | PRL | p11 | - \| \| - |
| Ka45 | I4,5 | PRL | p30 | - \| / \| - |
| | | PRL | p35 | - \| \| - |
| | | PRL | p11 | - \| / \| - |
| Ka46 | I4,6 | PRL | p30 | - \| / \| - |
| | | PRL | p35 | - \| \| - |

BITS

| MNEMONIC | VARIABLE | TASK | LABEL | SYMBOL |
|---|---|---|---|---|
| Km50 | 05,0 | POST | p50 | - \| \| - |
| | | POST | p150 | - \| \| - |
| | | POST | p150 | - \( \) - |
| Km51 | 05,1 | POST | p150 | - \| \| - |
| | | POST | p151 | - \( \) - |
| Sa21 | I2,1 | PRL | p15 | - \| \| - |
| | | CHART | X11 → X31 2/12 /7 | - \| \| - |
| | | CHART | X9 → X8 2/10 /0 | - \| \| - |
| | | CHART | X9 → X10 2/10 /1 | - \| \| - |
| | | CHART | X9 → X10 2/10 /1 | - \| / \| - |
| | | CHART | X11 → X0 2/12 /6 | - \| / \| - |
| Sa22 | I2,2 | PRL | p15 | - \| / \| - |
| | | POST | p153 | - \| \| - |
| | | POST | p154 | - \| \| - |
| | | POST | p155 | - \| \| - |
| | | POST | p156 | - \| \| - |

BITS

| MNEMONIC | VARIABLE | TASK | LABEL | SYMBOL |
|---|---|---|---|---|
| Ka48 | I4,8 | PRL | p10 | - \| / \| - |
| | | PRL | p11 | - \| / \| - |
| Ka49 | I4,9 | PRL | p10 | - \| / \| - |
| Ka4a | I4,A | CHART | X63 → X64 0/8 /1 | - \| / \| - |
| | | CHART | X5 → X6 2/2 /1 | - \| / \| - |
| Ka4b | I4,B | PRL | p10 | - \| / \| - |
| Ka4c | I4,C | PRL | p15 | - \| \| - |
| | | PRL | p30 | - \| \| - |
| | | PRL | p35 | - \| \| - |
| | | POST | p157 | - \| \| - |
| | | POST | p182 | - \| \| - |
| Ka4d | I4,D | POST | p176 | - \| \| - |
| Ka6c | 06,C | POST | p182 | - \( \) - |
| Ka6d | 06,D | POST | p183 | - (S) - |
| | | POST | p183 | - (R) - |
| Ka6e | 06,E | POST | p184 | - \( \) - |

BITS

| MNEMONIC | VARIABLE | TASK | LABEL | SYMBOL |
|---|---|---|---|---|
| Sa22 | I2,2 | CHART | X60 → X61 0/2 /1 | - \| / \| - |
| | | CHART | X11 → X31 2/12 /7 | - \| / \| - |
| Sa23 | I2,3 | PRL | p15 | - \| \| - |
| | | POST | p153 | - \| / \| - |
| | | POST | p154 | - \| / \| - |
| | | POST | p155 | - \| / \| - |
| | | POST | p156 | - \| / \| - |
| | | CHART | X60 → X61 0/2 /1 | - \| / \| - |
| | | CHART | X11 → X31 2/12 /7 | - \| \| - |
| Sa27 | I2,7 | POST | p154 | - \| \| - |
| Sa2b | I2,B | PRL | p15 | - \| / \| - |
| | | PRL | p15 | - \| \| - |
| | | POST | p150 | - \| / \| - |
| | | POST | p150 | - \| \| - |
| | | CHART | X6 → X7 2/4 /1 | - \| \| - |
| | | CHART | X6 → X7 2/4 /1 | - \| / \| - |

| | | | |
|---|---|---|---|
| | Station conf2_4 | | File Rev. : 01 |
| | | | Paragraph Rev. : 01 |
| TSX 27 47 | XREF BY MNEMONICS BITS | VMK | Author : xtel |
| | | | Date : 11/07/90 |
| Trial | Customer Application | F. LE ROY | Page : 6.11-2 |

**Sub-section** **Page**

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**2.2 Generating .DOC Files with PL7 Functions and X-TEL Tools 2/3**

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2.2-2 Generating a .DOC File in XTEL-MEM 2/3
2.2-3 Generating a .DOC File in PL7-3 2/4
2.2-4 Generating a .DOC File in PL7-2 2/4
2.2-5 Generating a .DOC File in PL7-AXE 2/5
2.2-6 Generating a .DOC File in PL7-COM 2/6
2.2-7 Generating a .DOC File in PL7-PCL or PL7-PMS/PMS2 2/7
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2.2-10 Generating a .DOC File in PL7-CONF 2/9
2.2-11 Generating a .DOC File in PL7-SDBASE 2/9
2.2-12 Generating a .DOC File in PL7-MOD 2/10
2.2-13 Generating a .DOC File in XBTL940 2/10

**2.3 Integrating and Managing Documentation Files in XTEL-DOC 2/11**

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2.3-2 Generating and Using General Information Files 2/11
2.3-3 Using Files Generated with PL7 Functions and X-TEL Tools 2/12
2.3-4 Generating Documentation Files 2/12
2.2-5 Managing Documentation Files 2/12

This section ends on page 2/12

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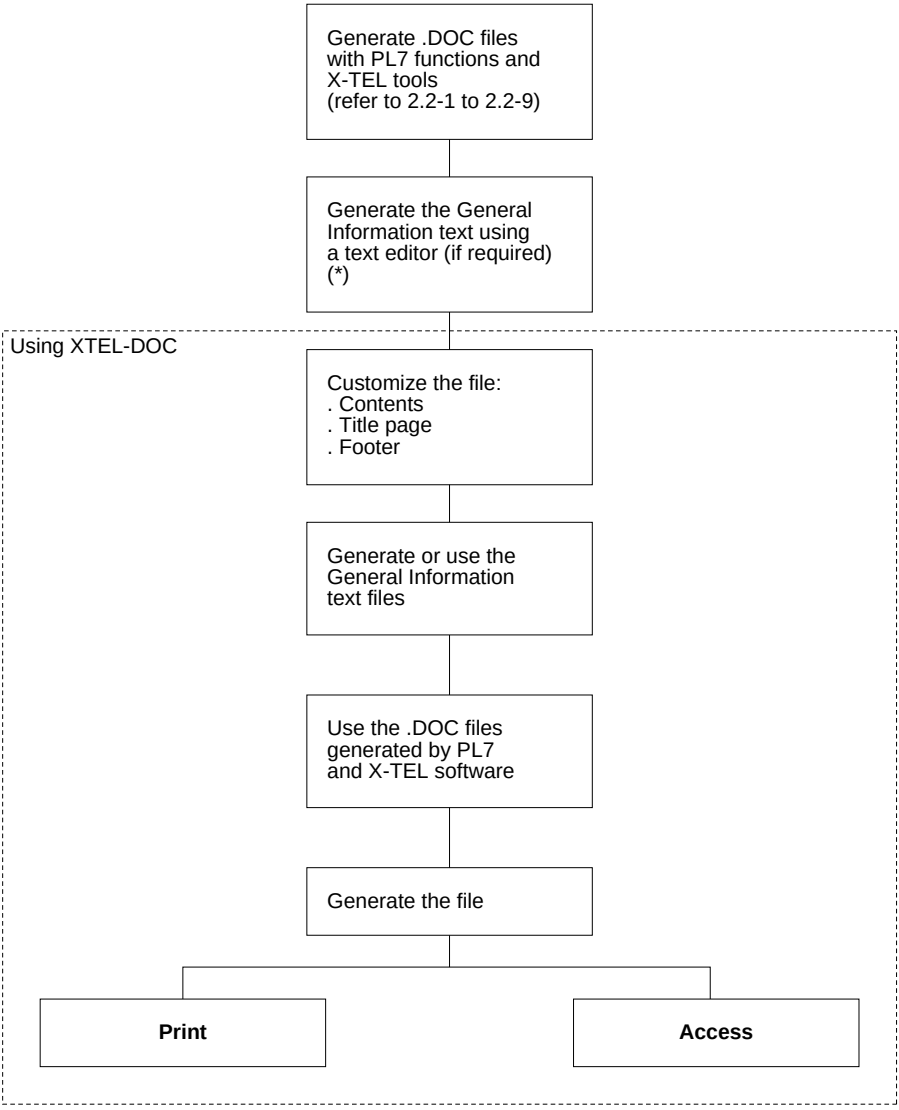
## 2.1 XTEL-DOC General Principles

The same principles apply to the creation and generation of Project or Station documentation files:




(*) General information can also be entered directly into XTEL-DOC using the OS/2 text editor.

F

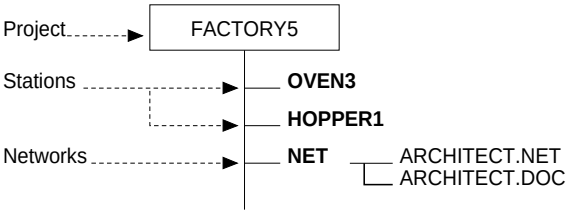
## 2.2 Generating .DOC Files with PL7 Functions and X-TEL Tools

### 2.2-1 Generating a .DOC File in PL7-NET (Project File)

Select the "Documentation" operating mode and select "XTEL DOC output" item from the documentation menu. The ARCHITECT.DOC project layout file that is generated can be included in the project documentation file.

(Refer to PL7-NET program documentation, section 4)

File tree




### 2.2-2 Generating a .DOC File in XTEL-MEM (Station File)

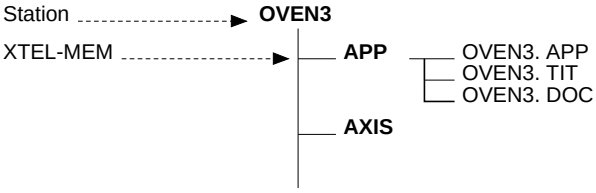
Select the "Document/Print" menu and select the Print action. Select the following parameters from the dialog box that is displayed:

- Print-out: File
- Type of Printer: Semi-Graphic

**OK starts** generation of the .DOC file that can be integrated into the station documentation file.

(Refer to X-TEL documentation: TXT DM TLS V5E, Divider D, Sub-section 2.5)

File levels

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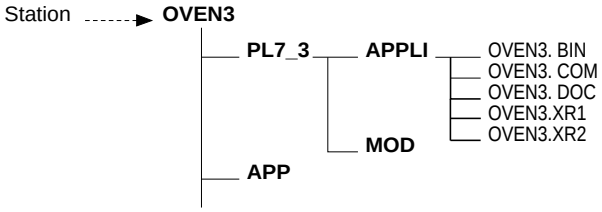
### 2.2-3 Generating a .DOC File in PL7-3 (Station File)

From the Document/Print screen:

- Call-up the Listing Contents screen and select the headings that will be used in the documentation file. By default, all headings are selected,
- Select the print parameters "Type of printing: LL or SL",
- Select the "Print Listing" action and validate the selection. Answer [YES] to the XTEL-DOC? prompt. The .DOC file will then be generated by PL7-3. It comprises all of the selected headings and can be included in the application file using XTEL-DOC.

**Note**: When the listing is generated for the first time, all headings must be selected.

File tree




**Important:**
If the user requires cross-references in the XTEL-DOC documentation file, it is necessary to store .XRi files (refer to the PL7-3 Operating Modes documentation, TXT DM PL7 3 V5E, Divider A, Sub-section 3.10).

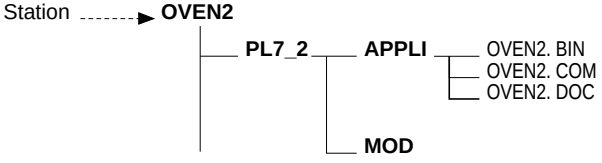
### 2.2-4 Generating a DOC File in PL7-2 (Station File)

From the Document/Print screen:

- Call-up the Listing Contents screen and select the headings that will be used in the documentation file. By default, all headings are selected,
- Select the print parameters "Type of printing: LL or SL",
- Select the "Print Listing" action and validate the selection. Answer [YES] to the XTEL-DOC? prompt. The .DOC file will then be generated by PL7-2. It comprises all of the selected headings and can be included in the application file using XTEL-DOC.

(Refer to PL7-2 Operating Modes documentation, TXT DM PL7 V5E, Section 14).

File tree



### 2.2-5 Generating a DOC File in PL7-AXE (Station File)

From the Operating Modes Selection screen:

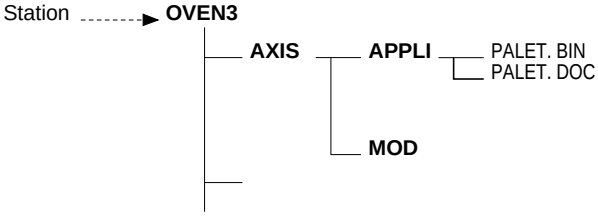
- Select the TSX working memory (the terminal must be connected to a PLC that supports TSX AXM 172/182 modules with applications to document).
- To document all applications for all axes, enter "*" as the axis number and "*" as the application number:
  AXIS = *
  APPLI = *
- Select the "Documentation" operating mode and set the parameters listed below via the dynamic soft keys that can be accessed in the selection screen for this mode:
  [PRI/FILE] Print to disk file,
  [FILE] Enter the name that the .DOC file will be stored under,
  [GRA Y/N] Graphic printing: Yes,
  [DIR Y/N] Print directory: Yes.

  <Enter> Starts generation of the .DOC file.

(Refer to the PL7-AXE axis control software documentation: TXT DM PL7 AXS V5E, Section 9).

**Note:** The message "XTEL-DOC compatible" is displayed opposite the graphic print-out item.

File tree




F

### 2.2-6 Generating a .DOC File in PL7-COM (Station File)

From the Operating Modes Selection screen:

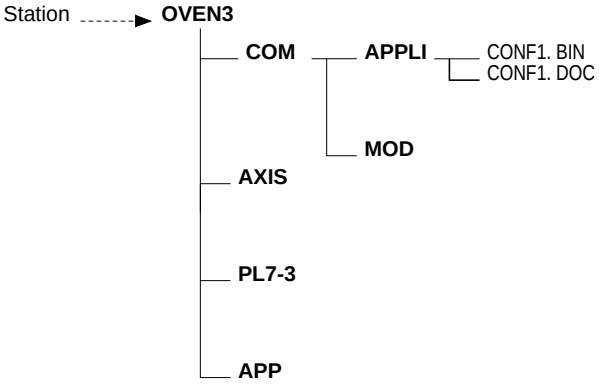
- Select the TSX FILE memory to work off-line in Local mode or select TSX memory to work on-line with the terminal connected to a PLC that supports TSX SCM modules with applications to document.
- To document all applications for all modules, enter "*" as the module number and "*" as the channel number:
  COM = *
  CHANNEL = *
- Select the "Documentation" operating mode and set the parameters listed below via the dynamic soft keys that can be accessed in the selection screen for this mode:
  [PRI/FILE] Print to disk file,
  [FILE] Enter the name that the .DOC file will be stored under,
  [GRA Y/N] Graphic printing: Yes,
  [DIR Y/N] Print directory: Yes.

  <Enter> Starts generation of the .DOC file.

(Refer to the PL7-COM Operating Modes documentation: TXT DM CMM V5E, Section 9).

**Note:** The message "XTEL-DOC compatible" is displayed opposite the graphic print-out item.

File tree

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### 2.2-7 Generating a .DOC File in PL7-PCL or PL7-PMS/PMS2 (Station File)

From the Operating Modes Selection screen:

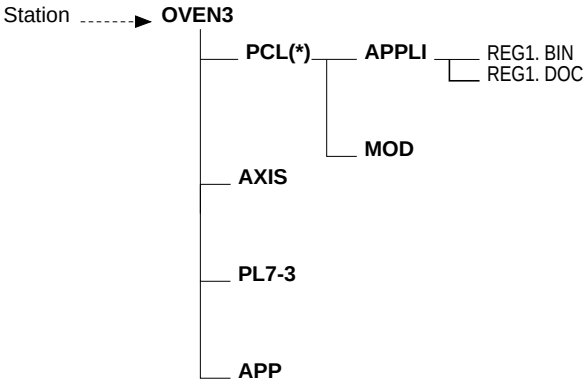
- Select the TSX FILE (PMX FILE for PL7-PMS or PL7-PMS2) memory to work off-line in Local mode or select TSX (PMX for PL7-PMS or PL7-PMS2) memory to work on-line with the terminal connected to a PLC.
- To document all applications for all TSX AEM modules, enter "*" as the module number and "*" as the application number:
  AEM = *
  APPLI = *
- Select the "Documentation" operating mode and set the parameters listed below via the dynamic soft keys that can be accessed in the selection screen for this mode:
  [PRI/FILE] Print to disk file,
  [FILE] Enter the name that the .DOC file will be stored under,
  [GRA Y/N] Graphic printing: Yes,
  [DIR Y/N] Print directory: Yes.

  <Enter> Starts generation of the .DOC file.

(Refer to the PL7-PCL (TXT DM PL7 PCL V5E), PL7-PMS (TXT DM PL7 PMS V5E) or PL7-PMS2 (TXT DM PL7 PMS2 V5E) documentation.

**Note:** The message "XTEL-DOC compatible" is displayed opposite the graphic print-out item.

File tree




(*) PMS for PL7-PMS or PL7-PMS2 software

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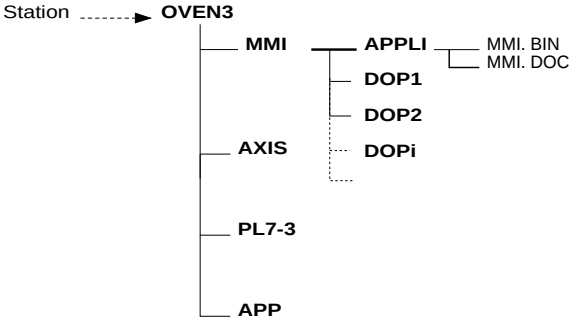
### 2.2-8 Generating a DOC File in PL7-MMI (Station File)

- From the PL7-MMI program primary window, select "Documentation" from the "Utilities" menu.
- Once the "Application Documentation" window is open, select "Station Documentation" from the "Print" menu.
- Select all of the tasks from the dialog box and click on "OK" to confirm, the documentation file is generated.

(Refer to PL7-MMI documentation, Divider C, Sub-section 2.6)

**Note:** Documentation must be generated for each PCM module in the application. PL7-MMI generates a single MMI.DOC file that contains all documentations.

File tree



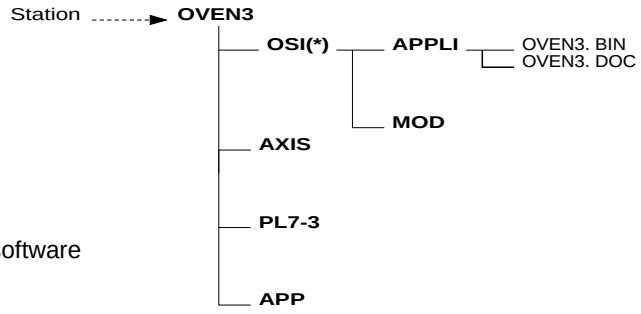

### 2.2-9 Generating a .DOC File in PL7-OSI or PL7-MMS (Station File)

From the PL7-OSI or PL7-MMS primary window, select the "Document/Print" menu, then select the Print action. Select the following parameters from the dialog box that is displayed:

- Print-out: File
- Type of Printer: Semi-Graphic

**OK starts** generation of the .DOC file that can be integrated into the station documentation file.

File tree




(*) MMS for PL7-MMS software

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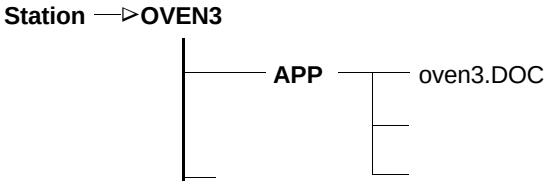
### 2.2-10 Generating the .DOC in XTEL-CONF (Station File)

- From the XTEL-CONF primary window, pull-down the "Documentation" menu and select "Generate".

(Refer to the TXT DM TLS V5E documentation, Divider D, Sub-section 1.8).

File tree



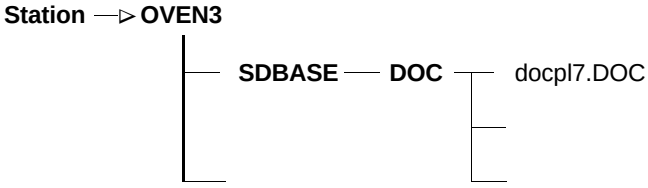

### 2.2-11 Generating the .DOC File in XTEL-SDBASE (Station File)

From the XTEL-SDBASE primary window, pull-down the "Documentation" menu and select "Generate". In the dialog box that is displayed, select the following parameters.

**OK** starts generation of the .DOC file that can be integrated into the station documentation file.

(Refer to the TXT DM TLS V5E documentation, Divider D, Sub-section 3.8).

File tree

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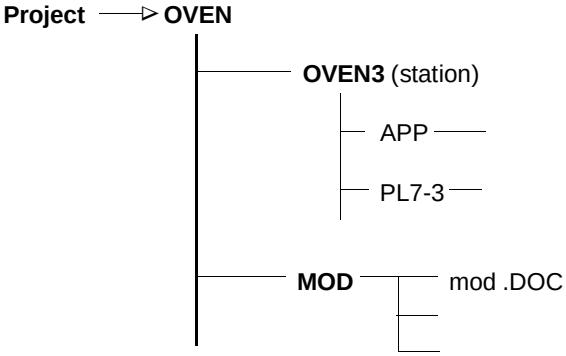
### 2.2-12 Generating a .DOC File in XTEL-MOD (Project and Station Files)

- From the XTEL-MOD primary window, pull-down the "Documentation" menu and select "Generate". From the dialog box displayed, select the parameters.

**OK** Starts generation of the .DOC file that can be integrated into the station documentation file.

(Refer to TXT DM MDD V5E documentation, Divider E, Sub-section 3.6).

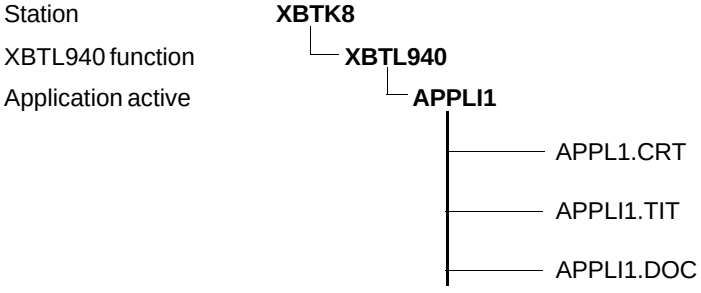
File tree




### 2.2-13 Generating the .DOC File with XBTL940 (Station File)

- Pull-down the "Documentation" menu and select the "Edit" command. Generate the title page and the footer.
- Pull-down the "Documentation" menu once again and select the "Print" command. From the dialog box displayed, select the following parameters:
  - Listing output: File,
  - Type of printer: Semi-Graphic.
- "OK" starts generation of the .DOC file that can be integrated into the station documentation file.
  (Refer to XBTL940 documentation: Divider A, Sub-section A7).

File tree

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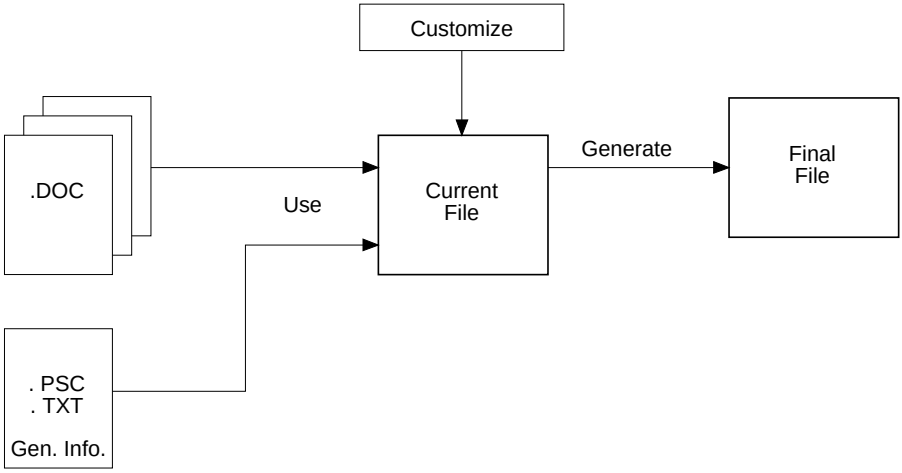
## 2.3 Integrating and Managing Application Files in XTEL-DOC




### 2.3-1 Customizing the Documentation File

Customizing the documentation file comprises:

- Generating the table of contents of the application (refer to sub-section 3.4),
- Entering footer information (refer to sub-section 3.5),
- Entering title page information (refer to sub-section 3.6).

### 2.3-2 Generating and Using General Information Files

For general information:

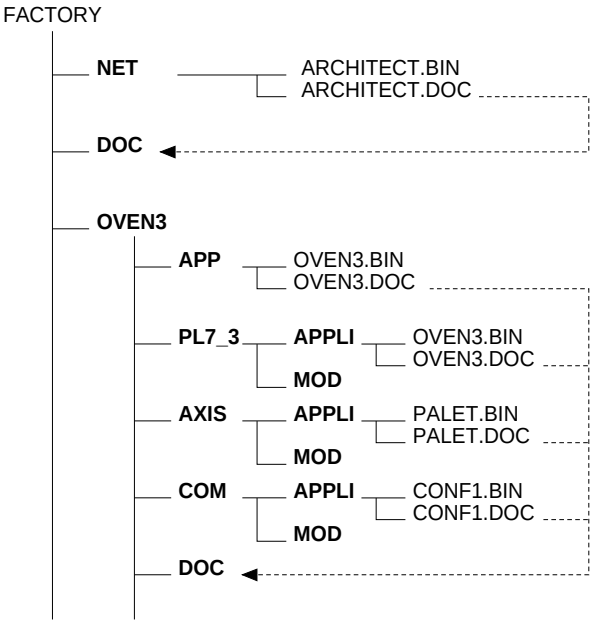
- Use the general information type files previously generated using other text processor applications (refer to sub-sections 3.7 and 4.2),
- If necessary, create new files with the OS/2 editor that can be directly accessed from XTEL-DOC (refer to sub-section 3.7).

F

### 2.3-3 Using Files Generated with PL7 Functions and X-TEL Tools

For configuring PL7 ... programs:

- Select the files generated by PL7 functions or X-TEL tools (refer to sub-section 3.8). The file levels shown opposite, illustrate the transfers performed by the XTEL-DOC program.




### 2.3-4 Generating Documentation Files

All of the above operations are only taken into account in the final documentation file when the file generation command is confirmed.
Until this command is executed, any operations in progress are stored in a "file in progress" disk file.

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### 2.3-5 Managing Documentation Files

The XTEL-DOC program automatically manages the documentation file versions and the versions of each paragraph (refer to the list of versions in sub-section 1.3).
When the documentation file is generated, XTEL-DOC increments the version (revision) level of the generated sections and paragraphs and that of the complete documentation file (it does not take into account modification of the title page, table of contents or footer).

**Note:** If a section is not regenerated when the selected .DOC files imply an update of this section, a star is displayed in place of the version number (revision level).

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| **3.2** | **Software Installation** | **3/4** |
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## 3.1 Hardware Description

A terminal with OS/2 and the X-TEL or MINI X-TEL Software Workshop installed, is required to use the XTEL-DOC program.

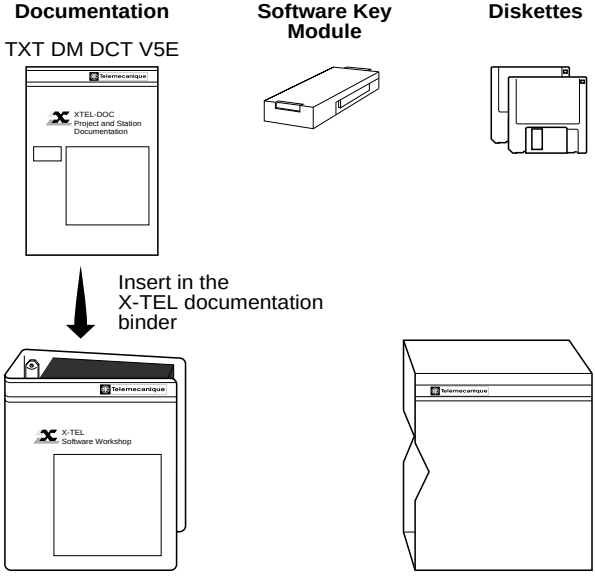
This means using one of the hardware configurations recommended below:

- An FTX 507 or FTX 417 with:
  - 6 to 8 MB of RAM,
  - A 40 MB hard disk (120 MB recommended for large or multiple station applications),
  - OS/2 version 1.3 or 2.1 operating system software,
  - A mouse (recommended).
- An IBM PS/2 or PC compatible configuration, comprising:
  - At least an 80386 microprocessor based microcomputer,
  - 6 to 8 MB of RAM,
  - A 40 MB hard disk (120 MB recommended for large or multiple station applications),
  - OS/2 version 1.2, 1.3 or 2.1 operating system software,
  - A high resolution VGA monitor and the appropriate national or international keyboard,
  - A mouse (recommended).

To print out the documentation files, a graphics capable Postscript printer is required (refer to sub-section 3.2-5).

The complete XTEL-DOC software package comprises:

- A 3 1/2" program diskette,
- A software key module,
- This manual, ref. TXT DM DCT V5E.

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## 3.2 Software Installation

### 3.2-1 Fitting the Software Key Module

Fit the software key module into the empty location in the software key module holder.

**Ensure that the microcomputer is powered-down before inserting the software key module.**

**Note:** The software key module contains the right of use required to run the XTEL-DOC program. The Key Manager, part of the X-TEL or MINI X-TEL Software Workshop, lets the user transfer this right of use to the work key module, freeing a software key module holder slot. For further information on using the Key Manager, refer to the X-TEL Software Workshop documentation (TXT DM XTEL V5E), Divider C, Section 9 or the MINI X-TEL Software Workshop documentation (TXT DM BJR V5E), Divider C, Section 2.

### 3.2-2 Initial Preparations

Before installing the XTEL-DOC program on the hard disk, it is recommended that the user:

- Make a copy of the program disk and that this disk be used for all installation procedures to avoid accidental damage to the original. Once it has been copied, the original disk should be kept in a safe place,
- Carefully read the licence and guarantee certificates that come with this program and that detail the conditions of use and the restrictions that apply to copying and installing the program.

**Important:**

The XTEL-DOC program diskette is supplied write protected. Do not change the position of the write protect tab on the diskette.

**Important:**

To install XTEL-DOC on an FTX 507 terminal, first update the Operating System version as described in the Information Sheet (W9 1329 098 01.01.A01) supplied with the terminal.

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### 3.2-3 Installation Conditions

XTEL-DOC is run in the X-TEL or MINI X-TEL Software Workshop environment.
The appropriate Software Workshop must already be installed on the microcomputer.

Once XTEL-DOC is installed, ensure that at least:

- 1 MB of free space is available on the XTEL-DOC target hard disk,
- 5 MB of free space is available on the application file hard disk partition.

### 3.2-4 Installation Procedure

The following operations must be performed before the XTEL-DOC program is installed:

1. **Ensure that the X-TEL or MINI X-TEL Software Workshop is already installed** (refer to the corresponding documentation):
   If so, proceed with the XTEL-DOC installation procedure described below. If not, first install the X-TEL (TXT L BASE V5E) or MINI X-TEL (TXT L BJR V5E) Software Workshop (refer to the coresponding documentation).
2. Close all work sessions in progress (refer to the corresponding documentation).

**XTEL-DOC program installation**

- Open an **OS/2 full screen session**, to do so:
  - **Insert the XTEL-DOC diskette** into the diskette drive,
  - **Type the drive identification letter** (a: or b:), where the diskette is located and press <Enter> to confirm,
  - Once a new prompt is displayed on-screen (e.g. [A:\] or [B:\]) type **install** and press <Enter> to confirm,
  - Follow the prompts displayed on-screen and press <Enter> to confirm the entries made,
  - Once the **installation procedure is complete**, and if this is the last program to install, run the configuration check as prompted on-screen,
  - Remove the XTEL-DOC diskette from the drive and return to the Software Workshop by pressing <Ctrl> <Esc>.

When the installation procedure is started, the first screen displayed is:

```
INSTALLATION LOGICIEL XTEL-DOC

XTEL-DOC SOFTWARE INSTALLATION

(C) TELEMECANIQUE 1990, V5
```

Press <Enter> to continue:

**Note**: To use XTEL-DOC version 5, a Software Workshop version 5 or higher is required.

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Once the installation procedure is started by pressing <Enter>, the XTEL-DOC program files are copied to the appropriate Software Workshop sub-directories.
Once this is complete, the following screen is displayed:

```
                    CONFIGURATION CHECK...

The installation procedure can perform a check on the program
configuration of the XTEL Software Workshop installed under OS/2.

If you have just completed the last program installation required before
starting the XTEL Software Workshop, you can run a complete check on the
program configuration. If not, run the complete check once you have
installed all XTEL software.

1   Last installation completed, run configuration check.
2   Run check later, other programs still waiting to be installed in the
    XTEL Software Workshop.
```

Your choice :

The user can select:

1 to run the X-TEL installation check procedure.

2 to skip the installation check. In both cases the XTEL-DOC installation procedure is completed and the following screen displayed:

```
                    INSTALLATION COMPLETE...

The installation procedure is complete.

The tool XTEL-DOC is now installed on the X-TEL software workshop
of Telemecanique.
```

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Press <Enter>:

**<Enter>** Returns the user to the OS/2 full screen window.

### 3.2-5 Installing the Printer Driver

A Postscript printer able to print out in landscape mode, in A4 or A3 format, is required. The printer interface can be serial or parallel.

In order to print an XTEL-DOC documentation file, the printer driver must first be installed in the system.

The following printer parameters must be selected:
- From the Printers List, select the appropriate Postscript printer driver for your printer,
- From the Papers List, select "Letter",
- From the Fonts List, select "Courier",
- Select "Landscape" layout mode
- Select 100% scaling.

These selections are made:
- From the Print Manager in OS/2 1.2 and 1.3 (refer to Sub-section 4.1),
- From the printer object for OS/2 2.1 (refer to the OS/2 2.1 documentation).

## 3.3 General

### 3.3-1 Accessing XTEL-DOC

In X-TEL, XTEL-DOC can be run at:

- **Project level**, when preparing the Project file:

X-TEL
→ Select the volume
→ Select the project
→ Select XTEL-DOC from Project Tools

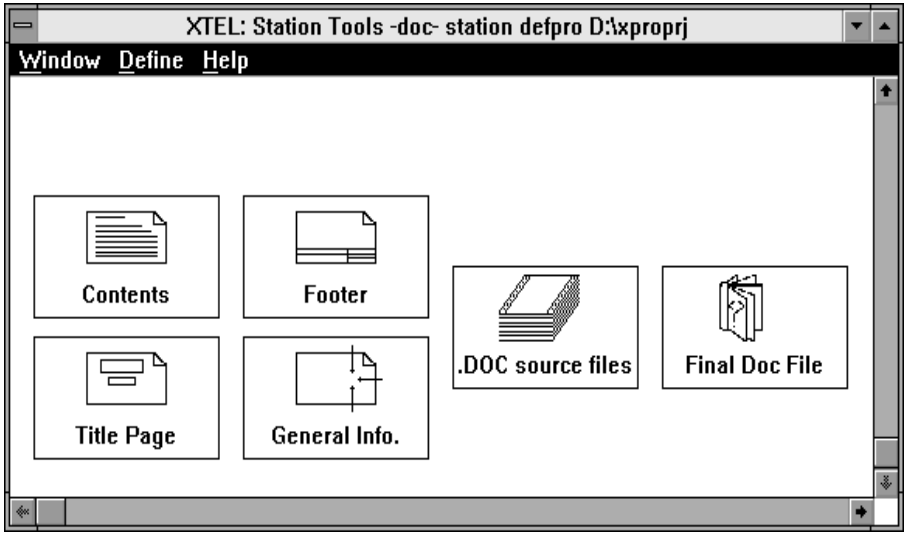
- **Station level**, when preparing the Station file:

X-TEL
→ Select the volume
→ Select the project
→ Select the station
→ Select XTEL-DOC from Station Tools

In MINI X-TEL, XTEL-DOC is invoked from the primary window:

MINI X-TEL
→ Primary Window
→ Select XTEL-DOC from the Primary Window

**Primary window**




The primary window displays the icons of the functions that available for preparing the application file. These functions are named to match the functions they perform.

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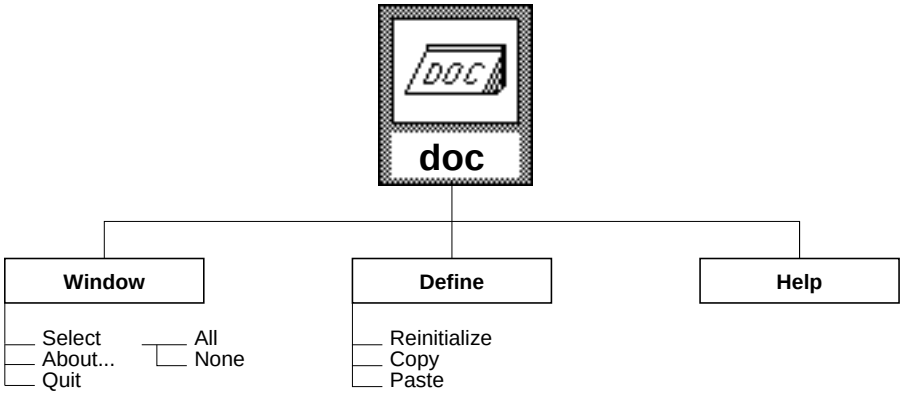
### 3.3-2 Primary Window Menu




## Window menu command

**Select → All**
Simultaneously selects all icons.

**Select → None**
Simultaneously deselects all icons.

**About...**
Displays the program information screen.

**Quit**
Quits XTEL-DOC.

## Define menu command

**Reinitialize**
Reinitializes all selected icons (clears the actions performed with each of the icons).

**Copy**
Copies the selected element to the clipboard.

**Paste**
Pastes the contents of the clipboard to the selected element.

The Copy/Paste actions let the user exchange elements (footer, title page, general information) between two stations or two projects.

## Help

Selects on-line help.

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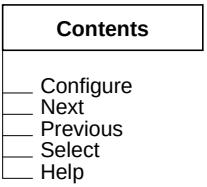
## 3.4 Contents

### 3.4-1 Contents Icon Commands


**Configure** Lets the user access the Contents icon.

**Next** Activates the next icon (Footer icon).

**Previous** Activates the previous icon (File icon).

**Select** Selects the icon.

**Help** Calls-up the on-line help screen.

### 3.4-2 Contents Dialog Box

This dialog box displays the contents of the documentation file. When the documentation file is created, a standard table of contents is offered to the user. The table of contents is built by selecting or deselecting the sections and paragraphs available. It is not possible to change the number of paragraphs or their order.

For a paragraph assigned to a function or a tool to be available, the function or the tool must first be installed and defined.

The sections and paragraphs can be enabled or not, selected or not.

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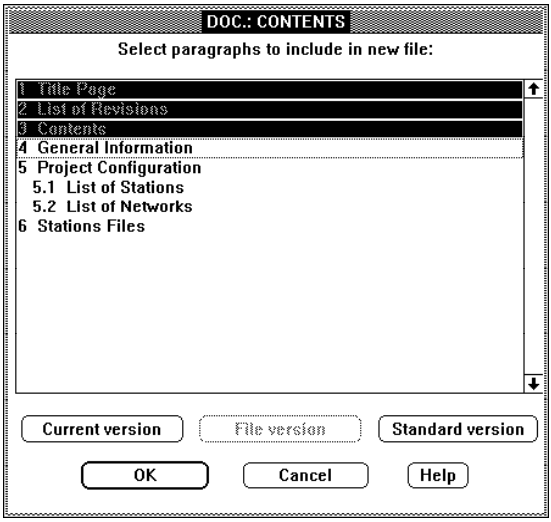
| Color | Enabled | Selected |
|---|---|---|
| Grey on White | No | - |
| Black on White | Yes | No |
| Grey on Black | Yes | Required |
| White on Black | Yes | On Request |




**Current version**
Displays the contents of the current documentation file.

**File version**
Displays the contents of the last documentation file generated.

**Standard version**
Displays the standard table of contents, where all enabled paragraphs are selected.

**OK**
Quits the function and saves the selections made.

**Cancel**
Quits the function without saving the selections made.

**Help**
Calls-up the on-line help screen.

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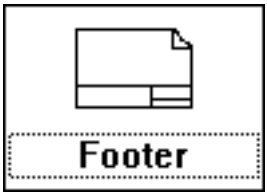
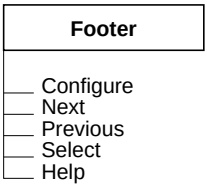
### 3.4-3 Contents Example

Refer to sub-section 1.3.

## 3.5 Footer

### 3.5-1 Footer Icon Commands




**Configure** Lets the user access the Footer icon.

**Next** Activates the next icon (Title Page icon).

**Previous** Activates the previous icon (Contents icon).

**Select** Selects the icon.

**Help** Calls-up the on-line help screen.

### 3.5-2 Footer Dialog Box

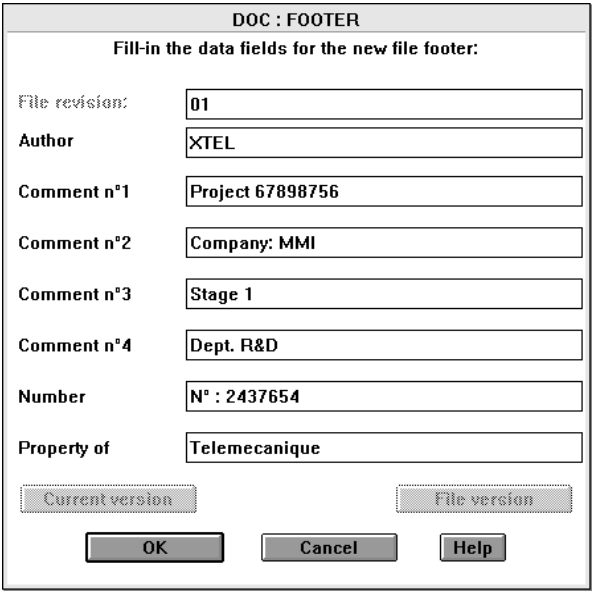
This dialog box lets the user enter footer information.

File revision: Automatically generated by XTEL-DOC. Cannot be modified,

Author: Automatically generated by XTEL-DOC from the user name entered in X-TEL. Can be modified,

Four comment fields of up to 20 characters each can be entered,

Number: This line starts with N° and will normally accept 15 characters (up to 20 if "N°:" is deleted),




Property of: This line lets the user specify a company name of up to 30 characters. The name entered becomes part of the copyright line printed below the footer, as shown in the example on the next page.

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**Current version**
Displays the contents of the current documentation file.

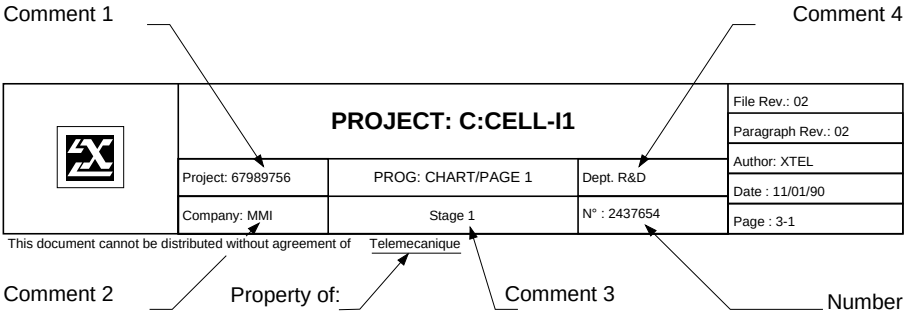
**File version**
Displays the contents of the last documentation file generated.

**OK**
Quits the function and saves the selections made.

**Cancel**
Quits the function without saving the selections made.

**Help**
Calls-up the on-line help screen.

### 3.5-3 Footer Example




The File Rev., Paragraph Rev., Date and Page information is automatically generated by XTEL-DOC. The Author information can be entered by the user and takes XTEL by default.

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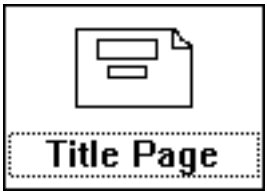
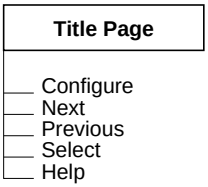
## 3.6 Title Page

### 3.6-1 Title Page Icon Commands




**Configure** Lets the user access the "Title Page" dialog box,

**Next** Activates the next icon (General Info. icon),

**Previous** Activates the previous icon (Footer icon),

**Select** Selects the icon,

**Help** Calls-up the on-help screen.

### 3.6-2 Title Page Dialog Box

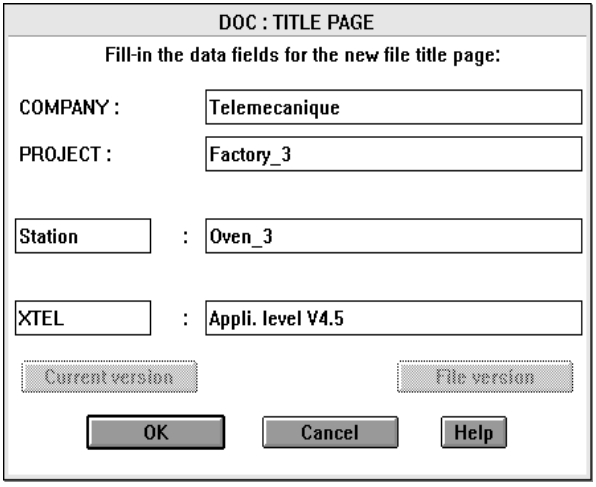
This dialog box lets the user enter information (up to 30 characters max.) that will appear on the title page:

1st. Line: COMPANY: Up to 30 characters can be entered,

2nd. Line: PROJECT: Up to 30 characters can be entered,

3rd. Line: This line comprises two entry fields:
One where Station is the default display where up to 10 characters can be entered, for station level documentation,
One where up to 30 characters can be entered,

4th. Line: This line comprises two entry fields:
One where up to 10 characters can be entered,
The other where up to 30 characters can be entered.

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**OK**
Quits the function and saves the selections made.

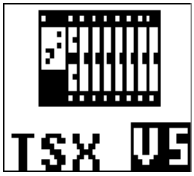
**Cancel**
Quits the function without saving the selections made.

**Help**
Calls-up the on-line help screen.

**Current version**
Displays the contents of the current documentation file.

**File version**
Displays the contents of the last documentation file generated.

### 3.6-3 Title Page Example




| TECHNICAL FILE | |
|---|---|
| Company | Telemecanique |
| Project | Factory_3 |
| Station | Oven_3 |
| XTEL | **V5 level application** |

| | | | |
|---|---|---|---|
| | Station wag_exl | | File Rev.: |
| | | | Paragraph Rev.: |
| | Comment 1 | Title Page | Comment 4 | Author: |
| | Comment 2 | Comment 3 | Number | Date: |
| | | | | Page: |

This document cannot be released with approval of Telemecanique

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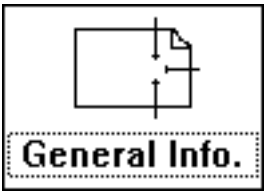
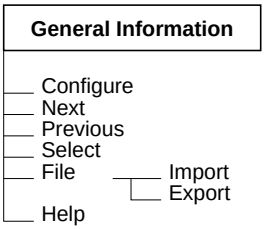
## 3.7 General Information

### 3.7-1 General Information Icon Commands




**Configure** Lets the user access the "General Information" dialog box.

**Next** Activates the next icon (.DOC icon).

**Previous** Activates the previous icon (Title Page icon).

**Select** Selects the icon.

**File → Import**
Lets the user access the "Import General Information" dialog box.

**File → Export**
Lets the user access the "Export General Information" dialog box.

**Help** Calls-up the on-line help screen.

### 3.7-2 General Information Dialog Box

This dialog box lets the user select from the files available in the .DOC directory of the selected Project or Station. These files are used to create the General Information page.

If no files are available, it is possible to:
- Create new ones with the OS/2 editor, or
- Import them with the File → Import action.

**Reminder:**
The files selected for importing must be:
- ASCII text files (.TXT extension),
- Postscript files (.PSC extension) or Encapsulated Postscript files (.EPS).

Postscript (.PSC) files can be generated in Word 5.0 and Encapsulated Postscript (.EPS) files in Word for Windows (refer to sub-section 4.3).

**Note**: Files with an .EPS extension must be renamed with a .PSC extension.

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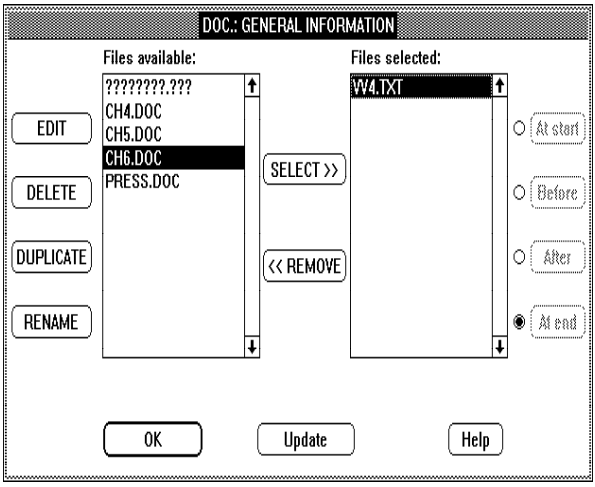


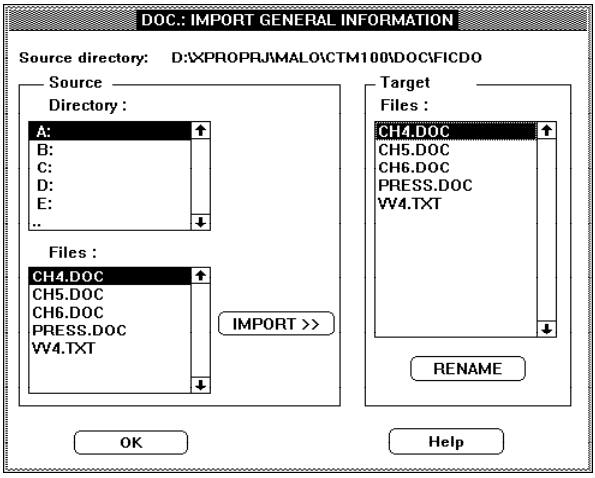

- **EDIT**
  Lets the user create or modify files with the OS/2 text editor. To create a file, select the ????????.??? file and rename it with the editor (refer to the OS/2 documentation for information on how to use the OS/2 text editor).
- **Update**
  Once a file is created with the OS/2 text editor, this action lets the user update the "Files available:" list. This ensures that a newly generated file is displayed.
- **DELETE** Deletes the selected file,
- **DUPLICATE** Duplicates the selected file and prompts the user to rename the file,
- **RENAME** Renames the selected file.
- **SELECT>>**
  Transfers the selected file from the "Files available:" list to the "Files selected:" list. Only files with a .TXT or .PSC extension can be selected.
  The position of the files in the right hand list is determined by the buttons that apply to this list (the position of a file in the list determines the order in which it is printed):
  • Start, places the file at the top of the list,
  • Before, places the file above the previously selected file,
  • After, places the file below the previously selected file,
  • End, places the file at the end of the list.
- **<<REMOVE**
  Transfers the selected file from the "Selected files:" list, to the "Files available:" list. This file is no longer part of the current documentation file.

**OK**
Quits the function and saves the selections made.

**Help**
Calls-up the on-line help screens.

F

### 3.7-3 Import General Information Dialog Box




This dialog box lets the user import Postscript or ASCII text files as files available for General Information from any logical drive and any directory.

The "Source directory: " line displays the current directory,

The "Directory:" list displays all of the logical drives and directories that are accessible.

Double clicking on ".." in the directory list, lets the user return to the next higher level. By selecting a logical drive, a directory or ".." and clicking on it, it is possible for the user to scan all of the directories available on a logical drive.

**IMPORT>>** Copies to the "Target" list one or more selected text files. These files can then be selected from the current directory by the "Configure" action accessed from the General Info icon.

**RENAME** Renames the file selected from the "Target files" list.

**OK** Quits the function.

**Help** Calls-up the on-line help screen.

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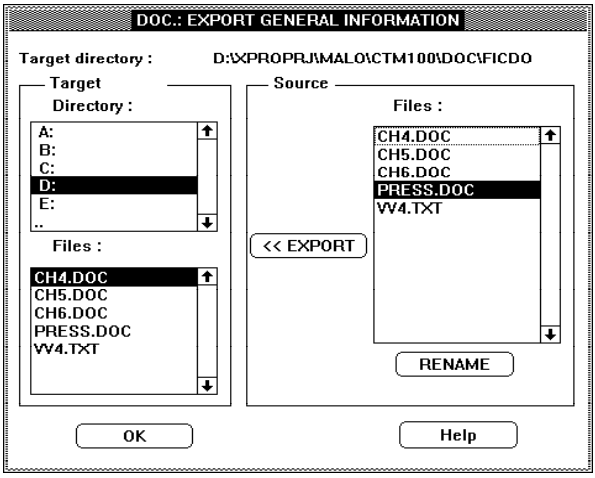
### 3.7-4 Export General Information Dialog Box




This dialog box lets the user export copies of files available for General Information to any logical drive and any directory, for use in other applications.

The "Target directory: " line displays the current directory.

The "Directory:" list displays all of the logical drives and directories that are accessible.

Double clicking on ".." in the directory list, lets the user return to the next higher level. By selecting a logical drive, a directory or ".." and clicking on it, it is possible for the user to scan all of the directories available on a logical drive.

**<<EXPORT** Copies to the "Target" list one or more files selected from the "Source" list.

**RENAME** Renames the file selected from the "Source" list.

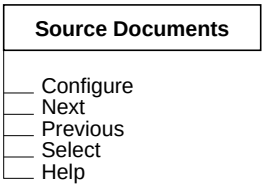
**OK** Quits the function.

**Help** Calls-up the on-line help screen.

F

## 3.8 Source Documents

### 3.8-1 .DOC Source Files Icon Commands


**Configure** Lets the user access the "Source Documents" dialog box.

**Next** Activates the next icon (File icon).

**Previous** Activates the previous icon (General Info. icon).

**Select** Selects the icon.

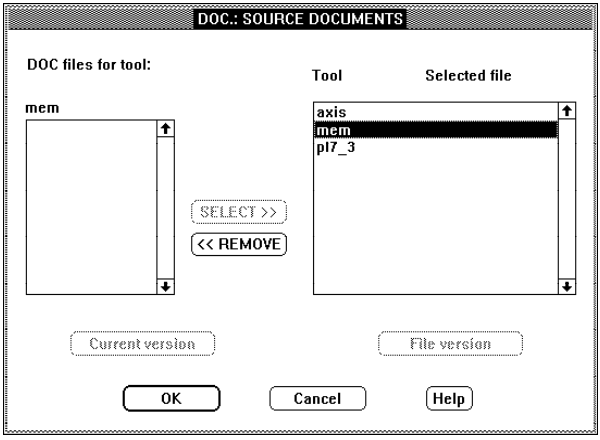
**Help** Calls-up the on-line help screen.

### 3.8-2 Source Documents Dialog Box

This dialog box lets the user select PL7-2, PL7-3 (V3, V4 or V5), PL7-AXE, PL7-COM, PL7-NET, PL7-MMI, PL7-PCL, PL7-PMS, PL7-OSI, XTEL-MEM, XTEL-CONF, XTEL-SDBASE, XTEL-MOD, XBTL940 "Source Documents" for integration into the application file.

The list field on the right displays a list of functions and tools available.

The list field on the left displays a list of .DOC files available to the function or tool selected from the list on the right.

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**SELECT>>** Transfers the file selected from the list on the left to the documentation file (list on the right, opposite the appropriate tool).

**<<REMOVE** Removes the selected file from the list on the right and transfers it to the list on the left. This file is no longer part of the current documentation file.

**Current version**
Displays the contents of the current documentation file.

**File version**
Displays the contents of the last documentation file generated.

**OK**
Quits the function and saves the selections made.

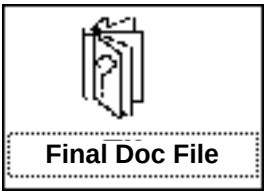
**Cancel**
Quits the function without saving the selections made.

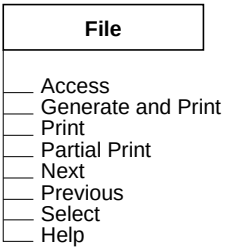
**Help**
Calls-up the on-line help screen.

**Note:** All of the .DOC files that are generated by the various tools and functions must use the same language. The same language must also be selected for XTEL-DOC.

## 3.9 Documentation File

### 3.9-1 Final Doc File Icon Commands




| | |
|---|---|
| **Access** | Lets the user access the documentation file access window. |
| **Generate and Print** | Lets the user access the "Select paragraphs to generate" dialog box. |
| **Print** | Lets the user access the "Select paragraphs to print" dialog box. |
| **Partial Print** | Lets the user access the "Select paragraph to print" dialog box. |
| **Next** | Activates the next icon (Contents icon). |
| **Previous** | Activates the previous icon (.DOC icon). |
| **Select** | Selects the icon. |
| **Help** | Calls-up the on-line help screen. |

### 3.9-2 Select Paragraphs to Generate Dialog Box

This is the final operation that lets the user generate and, if necessary, print-out the final documentation file, based on the selected configurations and icons.

To access the dialog box, all of the .DOC files that form the various paragraphs declared in the table of contents must already have been selected.

The dialog box will then display a list of all of the sections and paragraphs to generate. The first time generate is selected, all of the paragraphs selected in the table of contents are proposed. Once files have been updated with one of the specialized X-TEL tools, only updated files are proposed.

Any file that is regenerated is incremented by one version level (refer to sub-section 2.3-5).

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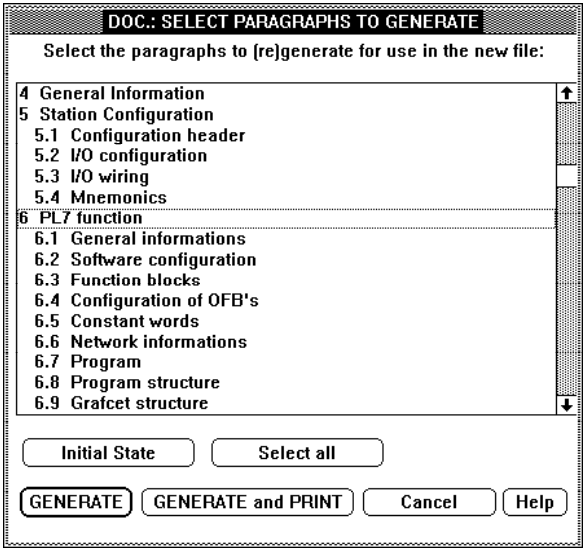
**Initial State**
Returns to the selection initially proposed when the icon was first opened.

**Select all**
Selects all sections and paragraphs.

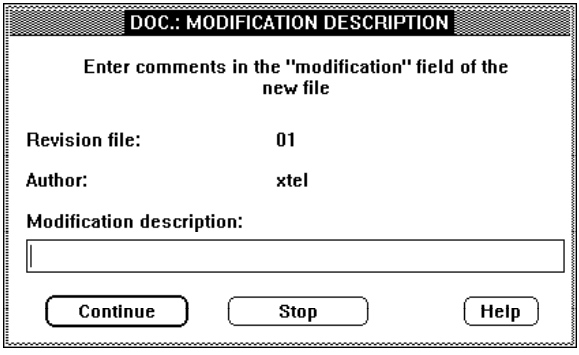
**GENERATE**
Starts generation of the final documentation file. A dialog box is displayed to allow the user to identify the modification. The modification can be identified by a comment of up to 30 characters that is displayed in the documentation file update revision list (refer to sub-section 1.3).




**GENERATE and PRINT**
Links documentation file generation and printing-out.

**Cancel**
Returns the user to primary window of the mode.

**Help**
Calls-up the on-line help screen.




**Continue**
Starts generation of the selected paragraphs and displays a dialog box with a "Stop Generation" button which displays information while file generation is in progress: page name, current processing etc.

**Stop**
Returns the user to the primary window without starting generation.

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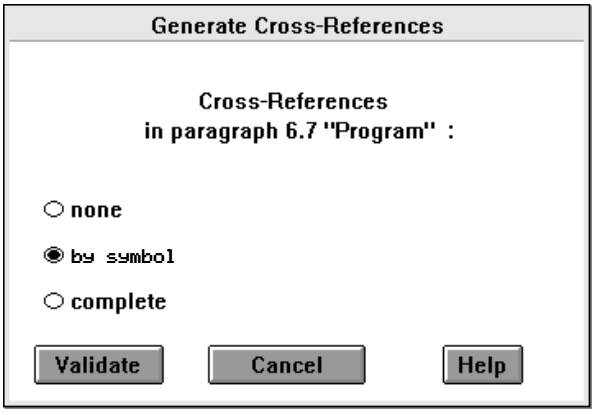
### Selecting cross-reference generation mode

If the documentation file comparises a PL7-3 program paragraph, XTEL-DOC will offer a choice by dialog box.

**none**
No cross-references are generated.

**by symbol**
Starts generation and for the PL7-3 program, displays a simplified view of the cross-references as shown below.

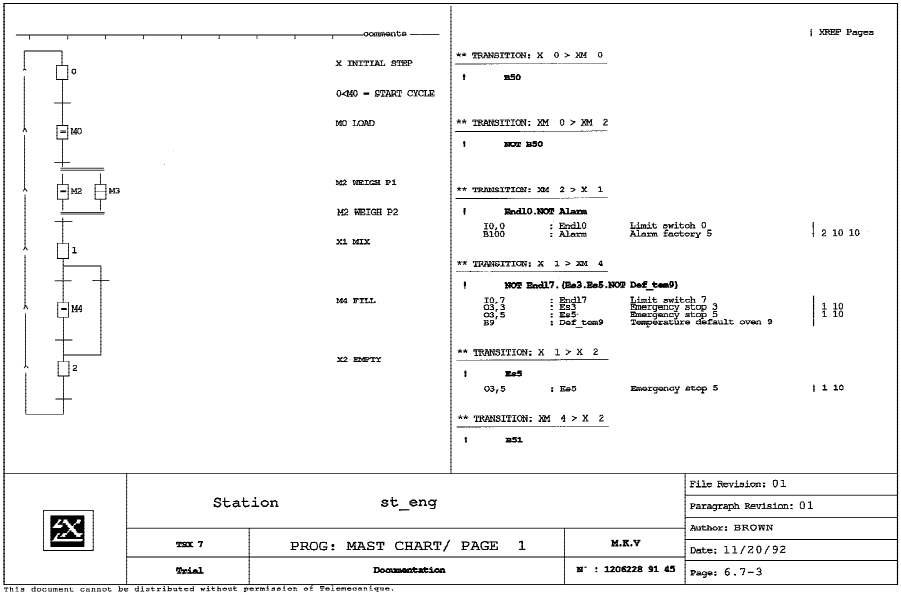
**complete**
Starts generation and for the PL7-3 program, displays a complete view of the cross-references as shown on the next page.




**Validate** starts generation of the selected paragraphs.

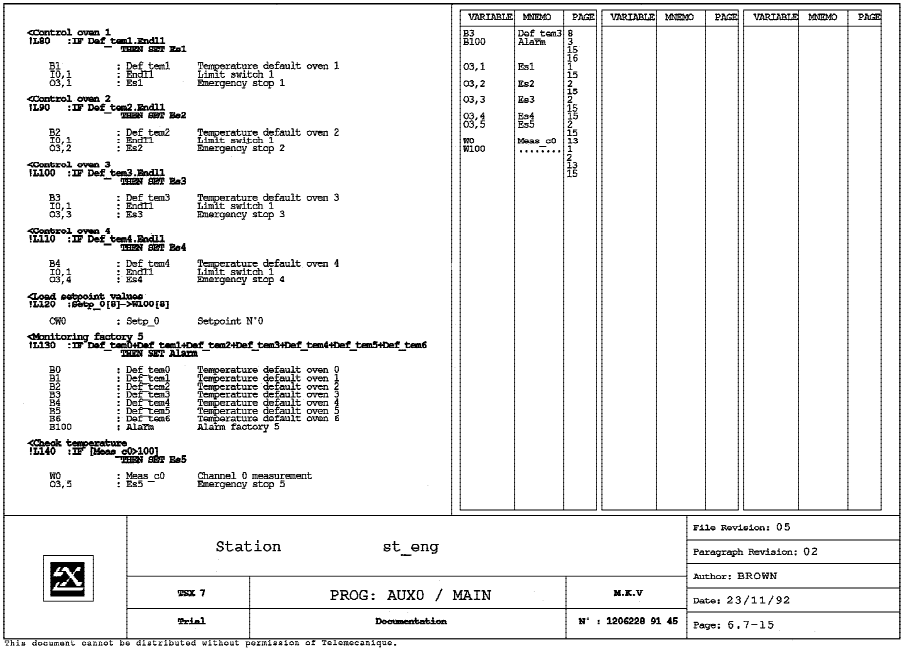
**Cancel** returns the user to the primary window.

### Cross-references "by symbol":



This simplified presentation avoids increasing the number of pages in the program documentation file.
In the PL7-3 program, XTEL-DOC adds the page numbers where the variable is accessed in write mode. This information is displayed opposite the description of the variables and their symbol, and after a "|" separator character. If the variable requires more that 4 or 5 pages of references, XTEL-DOC prints the numbers of the pages around the current page and before or after these numbers prints a specific character ("<" or ">") to indicate that the sequence of cross-references is incompletely printed-out.

**Complete cross-references:**



```
<Control oven 1
!L80   :IF Def_tem1.Endll
          THEN SET Es1

    B1          : Def_tem1     Temperature default oven 1
    I0,1        : Endll        Limit switch 1
    O3,1        : Es1          Emergency stop 1

<Control oven 2
!L90   :IF Def_tem2.Endll
          THEN SET Es2

    B2          : Def_tem2     Temperature default oven 2
    I0,1        : Endll        Limit switch 1
    O3,2        : Es2          Emergency stop 2

<Control oven 3
!L100  :IF Def_tem3.Endll
          THEN SET Es3

    B3          : Def_tem3     Temperature default oven 3
    I0,1        : Endll        Limit switch 1
    O3,3        : Es3          Emergency stop 3

<Control oven 4
!L110  :IF Def_tem4.Endll
          THEN SET Es4

    B4          : Def_tem4     Temperature default oven 4
    I0,1        : Endll        Limit switch 1
    O3,4        : Es4          Emergency stop 4

<Load setpoint values
!L120  :Setp_0[0]->W100[0]

    CW0         : Setp_0       Setpoint N°0

<Monitoring factory 5
!L130  :IF Def_tem0+Def_tem1+Def_tem2+Def_tem3+Def_tem4+Def_tem5+Def_tem6
          THEN SET Alarm

    B0          : Def_tem0     Temperature default oven 0
    B1          : Def_tem1     Temperature default oven 1
    B2          : Def_tem2     Temperature default oven 2
    B3          : Def_tem3     Temperature default oven 3
    B4          : Def_tem4     Temperature default oven 4
    B5          : Def_tem5     Temperature default oven 5
    B6          : Def_tem6     Temperature default oven 6
    B100        : Alarm        Alarm factory 5

<Check temperature
!L140  :IF [Meas_c0>100]
          THEN SET Es5

    W0          : Meas_c0      Channel 0 measurement
    O3,5        : Es5          Emergency stop 5
```

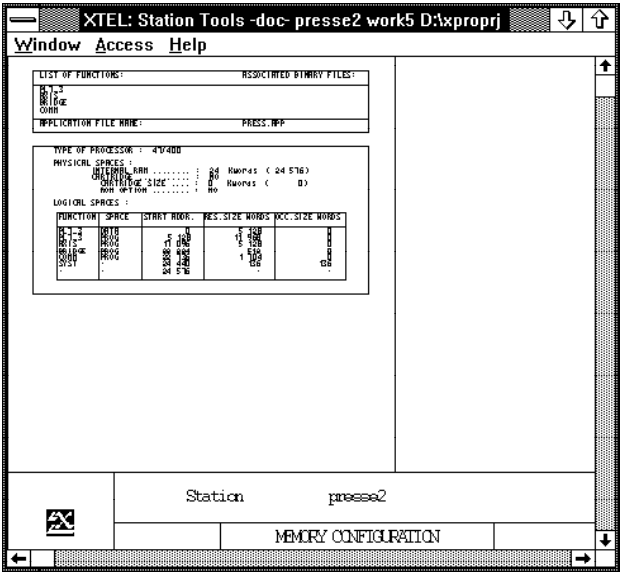
| VARIABLE | MNEMO | PAGE | VARIABLE | MNEMO | PAGE | VARIABLE | MNEMO | PAGE |
|---|---|---|---|---|---|---|---|---|
| B3 | Def_tem3 | 8 | | | | | | |
| B100 | Alarm | 8 | | | | | | |
| | | 15 | | | | | | |
| | | 16 | | | | | | |
| O3,1 | Es1 | 1 | | | | | | |
| | | 15 | | | | | | |
| O3,2 | Es2 | 2 | | | | | | |
| | | 15 | | | | | | |
| O3,3 | Es3 | 3 | | | | | | |
| | | 15 | | | | | | |
| O3,4 | Es4 | 4 | | | | | | |
| O3,5 | Es5 | 5 | | | | | | |
| | | 15 | | | | | | |
| W0 | Meas_c0 | 13 | | | | | | |
| W100 | ..... | 1 | | | | | | |
| | | 2 | | | | | | |
| | | 13 | | | | | | |
| | | 15 | | | | | | |

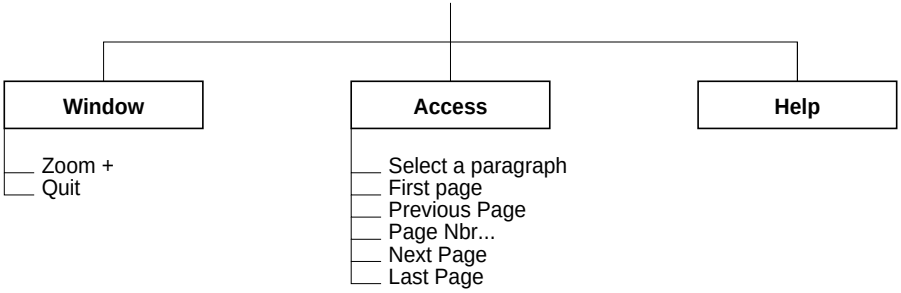
| | | |
|---|---|---|
| | Station st_eng | File Revision: 05 |
| | | Paragraph Revision: 02 |
| | | Author: BROWN |
| TSX 7 | PROG: AUX0 / MAIN | M.K.V |
| Trial | Documentation | N° : 1206228 91 45 |
| | | Date: 23/11/92 |
| | | Page: 6.7-15 |



This presentation doubles the number of pages in the PL7-3 paragraph.
It prints-out the Ladder Diagram program on the left half-page and the Literal program or Grafcet on the right-half page: 3 tables of three columns, comprising all of the variables that appear in the left-half page, printed in alphabetical order. The first column comprises the name of the variable, the second column the mnemonic assigned to it and the third column, the reference of the pages where the variable is accessed in write mode.

### 3.9-3 Access Window




This window lets the user display the contents of the documentation file. Before this screen can be accessed, the user must first ensure that the Courier font is installed in the system (refer to sub-section 4.2).

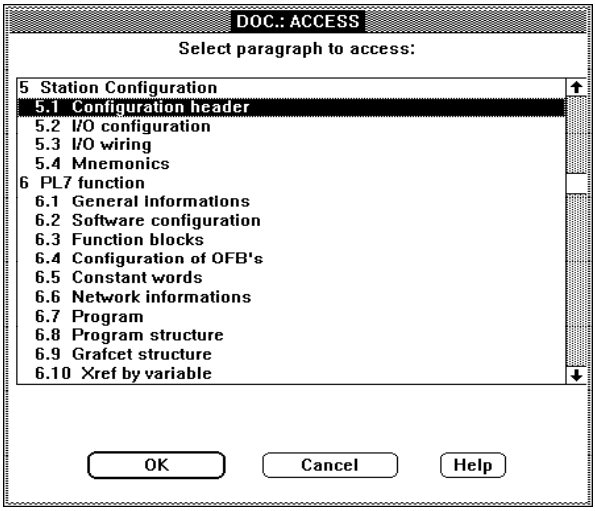
#### Window menu

**Zoom+**
Displays the page currently being accessed either in large scale (Zoom active) or so that the entire page can be displayed on-screen (zoom not active).

**Quit**
Quits the Access window.

## Access menu

**Select a paragraph**
Lets the user access the Access dialog box. This dialog box is used to select the paragraph to access.




**First page**
Access to the first page of the paragraph to display.

**Previous Page**
Access to the page before the one currently being displayed.

**Page Nbr...**
Direct access to the page specified by its number.

**Next Page**
Access to the page after the one currently being displayed.

**Last Page**
Access to the last page of the paragraph to display.

**Help**
Calls-up the on-line help screen.

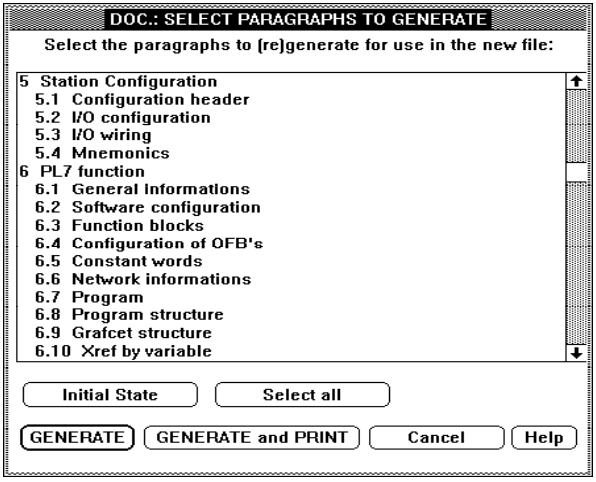
F

### 3.9-4 Select Paragraphs to Generate Dialog Box

This dialog box displays the table of contents of the final documentation file, with the following display attributes:

- Dimmed: Paragraphs that are not present in the documentation file,
- White on black: Paragraphs to print first to ensure an up to date documentation file.

Select paragraphs to generate.




**Initial State**
Returns the user to the selection displayed when the icon was first selected.

**Select all**
Selects all sections and paragraphs.

**GENERATE**
Generates the documentation file.

**GENERATE and PRINT**
Generates and prints the documentation file.

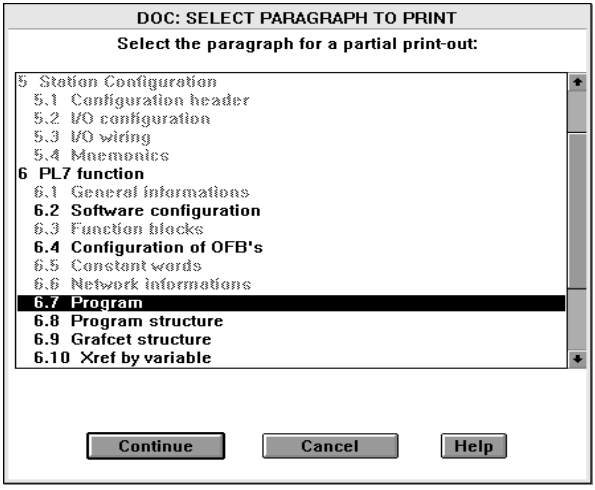
**Cancel**
Returns the user to the previous window.

**Help**
Calls-up the on-line help screen.

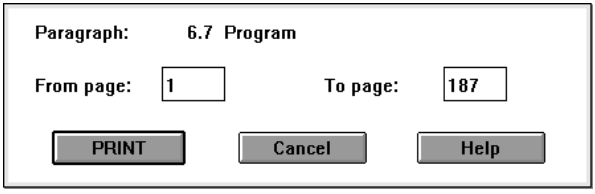
### 3.9-5 Select Paragraph to Print Dialog Box

The Dialog box displays the table of contents for the final documentation file with any paragraphs that do not exist in the documentation shown dimmed.

Select a paragraph for a partial print-out.




**Continue**
Lets the user access the dialog box shown below allowing the user to select pages in the paragraph to print-out.




Select the pages to print.

**PRINT**
Prints the selected pages.

**Cancel**
Returns the user to the previous window.

**Help**
Calls-up the on-line help screen.

F

## 3.10 Error Messages

**"Are you sure you want to replace xxxx ?"**

| Probable cause | Remedial action |
|---|---|
| The user is asked to confirm the replacement of xxxx by the result of the Copy command. | |

**"Cannot find the .DOC files for tool xxxx."**

| Probable cause | Remedial action |
|---|---|
| The directory indicated in the description of Tool/Station xxxx cannot be accessed. | |

**"CAUTION: Error in file xxxx to import."**

| Probable cause | Remedial action |
|---|---|
| File xxxx could not be imported. | Check that the file is not protected. |

**"CAUTION: File not deleted: xxxx."**

| Probable cause | Remedial action |
|---|---|
| File xxxx selected for deletion could not be deleted. | Check that it is not write protected or open in an application in another session. |

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**"CAUTION: File not duplicated: xxxx."**

| Probable cause | Remedial action |
|---|---|
| File xxxx entered as the target file for duplication could not be created. | Check that there is not already a file xxxx that is write protected or open in an application in another session. |

**"CAUTION: file xxxx does not exist."**

| Probable cause | Remedial action |
|---|---|
| The General Information file xxxx referred to by the Copy command no longer exists. | |

**"CAUTION: file xxxx not renamed."**

| Probable cause | Remedial action |
|---|---|
| File xxxx entered as the new name of the renamed file could not be created. | Check that there is not already a file xxxx that is write protected or open in an application in another session. |

**"CAUTION: File xxxx will be overwritten."**

| Probable cause | Remedial action |
|---|---|
| The name entered for the resulting file (xxxx) corresponds to an existing file. | Change the filename. |

**"CAUTION: Only files *.TXT or *.PSC can be selected."**

| Probable cause | Remedial action |
|---|---|
| The selected file does not have a .TXT or .PSC extension. | Rename the file so that it takes one of these extensions, depending on its type (Text or Postscript) or select another file. |

**"CAUTION: operation impossible, not enough room on the disk"**

| Probable cause | Remedial action |
|---|---|
| There is not enough space on the volume containing the Project/Station where XTEL-DOC is running to perform the operation. | Release enough space on the selected volume. |

**"CAUTION: operation impossible, not enough room on the disk"**

| Probable cause | Remedial action |
|---|---|
| There is not enough space on the target disk. | Clear enough space from the target disk. |

**"CAUTION: operation impossible, not enough room on the disk"**

| Probable cause | Remedial action |
|---|---|
| There is not enough space on the volume containing the Project/Station where XTEL-DOC is running to perform the operation. | Release enough space on the selected volume. |

**"CAUTION: operation impossible. Refer to file: xxxx."**

| Probable cause | Remedial action |
|---|---|
| The command cannot be executed with file xxxx as target. | Check that:<br>• The syntax of xxxx corresponds to the filename,<br>• File xxxx is not write protected. |

**"CAUTION: Operation impossible, same path xxxx."**

| Probable cause | Remedial action |
|---|---|
| It is not possible to import or export to and from the space that already contains the General Information files. | Select another path. |

**"DOC file : xxxx is invalid"**

| Probable cause | Remedial action |
|---|---|
| | Check that:<br>• this file is in semi-graphic format,<br>• that it was generated in the same language as XTEL-DOC. |

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**"Drive xxxx access not available"**

| Probable cause | Remedial action |
|---|---|
| The contents of drive xxxx are:<br>• not formatted or<br>• unreadable | |

**"Error: Proprietary font xxxx not found. Access terminated."**

| Probable cause | Remedial action |
|---|---|
| No .DLL file in path \XPROSYS\DLL. | Reinstall XTEL-DOC. |

**"Error: Public font xxxx not found. Access terminated."**

| Probable cause | Remedial action |
|---|---|
| Font xxxx is not installed. | Install and add font xxxx using the OS/2 control panel, refer to sub-section 4.2. |

**"Error while reading index list."**

| Probable cause | Remedial action |
|---|---|
| One of the files assigned to paragraph xxxx was modified. | Regenerate the paragraph. |

**"Error while reading page: xxxx or index: yyyy file."**

| Probable cause | Remedial action |
|---|---|
| The files assigned to paragraph xxxx were modified. | Regenerate the paragraph. |

**"Execution Error: Initialization Impossible."**

| Probable cause | Remedial action |
|---|---|
| XTEL-DOC cannot determine the tools or functions installed for the current Station or Project where it is running. | Reinstall XTEL-DOC |

**"Execution Error on xxxx."**

| Probable cause | Remedial action |
|---|---|
| An error occurred while running .DLL file xxxx. | Use another Project/Station to check if the same problem occurs with the same Tool/Function combination. If so, reinstall XTEL-DOC. |

**"File xxxx selected for Tool/Function xxxx does not exist."**

| Probable cause | Remedial action |
|---|---|
| File xxxx previously selected by Tool/ Function xxxx, no longer exists in the .DOC file space assigned to this Tool/Station. | Replace or select another .DOC file. |

**"Footer list error. Stop printing?"**

| Probable cause | Remedial action |
|---|---|
| The Project/Station footer is incoherent. | Reconfigure the footer. If the message persists, check the installation of XTEL-DOC. |

**"Footer not found."**

| Probable cause | Remedial action |
|---|---|
| The Project/Station footer or the type of footer was not found. | Reconfigure the footer. If the message remains, check for correct XTEL-DOC installation. |

**"Impossible to export, drive xxxx is write protected"**

| Probable cause | Remedial action |
|---|---|
| The target drive for the export action is write protected. | Remove write protection. |

**"Impossible to paste: files do not exist."**

| Probable cause | Remedial action |
|---|---|
| The space where General Information was stored and referenced by the Copy command is no longer present. | The original XTEL-DOC tool was removed from the system. |

**"Impossible to start: not enough room on the disk"**

| Probable cause | Remedial action |
|---|---|
| Not enough space left on the disk/ volume containing the Project/Station that XTEL-DOC is run from. | Leave at least 30 Kbytes free space. |

**"Incompatible buffer: Nothing pasted."**

| Probable cause | Remedial action |
|---|---|
| There is an incompatibility between the elements selected for the Copy command and the elements selected for the Paste command. | Select compatible elements. |

**"Load error on xxxx."**

| Probable cause | Remedial action |
|---|---|
| An error occurred while loading .DLL file xxxx. | Use another Project/Station to check if the same problem occurs with the same Tool/Function combination. If so the .DLL file was modified and XTEL-DOC must be reinstalled. |

**"Memory allocation error on font loading."**

| Probable cause | Remedial action |
|---|---|
| There is not enough memory available to load the font. | Release memory by closing other applications. If necessary, quit XTEL-DOC then restart it again later. |

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**"Not enough room on the disk"**

| Probable cause | Remedial action |
|---|---|
| For each paragraph to generate, a test is made to ensure that there is at least enough space for the .DOC file of the related tool. ated. | Clear extra space on the Disk/ Volume that contains the Project/ Station from which XTEL-DOC is run, before the file can be gener- |

**"Paragraph page and index files not found: xxxx"**

| Probable cause | Remedial action |
|---|---|
| The files assigned to paragraphs xxxx are no longer accessible. | Regenerate the paragraph. |

**"Read error in general information file xxxx."**

| Probable cause | Remedial action |
|---|---|
| File xxxx, that contains the list of files selected to make up the General Information paragraph was damaged. | Reselect the files that for the paragraph. |

**"Tool/Function xxxx not loaded."**

| Probable cause | Remedial action |
|---|---|
| The Tool or Function xxxx is not loaded and therefore not documented in XTEL-DOC. The paragraphs related to it are therefore not included in the contents. | Remove and reinstall this Tool/ Function. |

**"Update error."**

| Probable cause | Remedial action |
|---|---|
| An error occurred while updating the internal structure of XTEL-DOC. A file may have remained open due to a generating error. | Generate the file again. If the error persists, reinitialize the entire file. |

| Sub-section | | Page |
|---|---|---|
| **4.1** | **Printer Driver Installation and Configuration** | **4/2** |
| | 4.1-1 Printer Driver Installation for OS/2 1.2/1.3 | 4/2 |
| | 4.1-2 Printer Driver Configuration for OS/2 1.2/1.3 | 4/4 |
| | 4.1-3 Printer Driver Installation for OS/2 2.1 | 4/6 |
| | 4.1-4 Printer Driver Configuration for OS/2 2.1 | 4/6 |
| | 4.1-5 Example | 4/6 |
| **4.2** | **Courier Font Installation** | **4/7** |
| | 4.2-1 For OS/2 1.2/1.3 | 4/7 |
| | 4.2-2 For OS/2 2.1 | 4/8 |
| **4.3** | **Generating Text Files in Word 5.0 or Word for Windows** | **4/9** |
| **4.4** | **Storing Documentation Files on Diskette** | **4/10** |

This section ends on page 4/10

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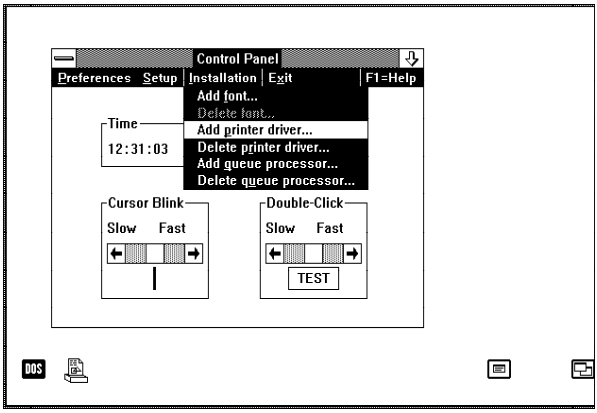
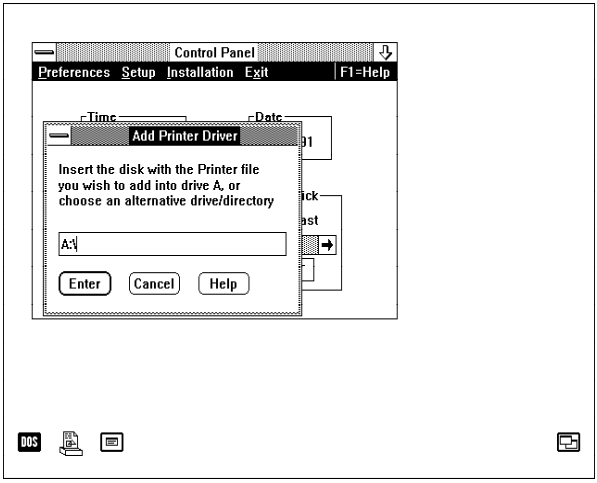
## 4.1 Printer Driver Installation and Configuration

### 4.1-1 Printer Driver Installation for OS/2 1.2/1.3

- Open the Desktop Manager window and select the Utilities Group,
- From the Utilities Group menu, select the Control Panel,
- From the Control Panel, select the Installation menu,
- Select the Add Printer Driver action which displays the screen shown below:




- Insert the printer driver diskette,
- Select the Enter button to list all of the printer drivers available on the diskette.

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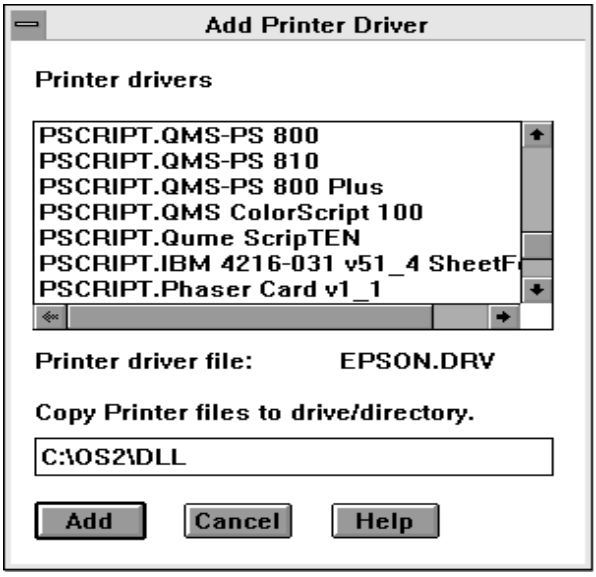
- Select the printer driver required,
- Select the Add button.




- If the printer driver is already present on the hard disk, the following screen is displayed:


* Select **Yes** to replace the existing version or **No** to add the newly selected printer driver without replacing the previous version.

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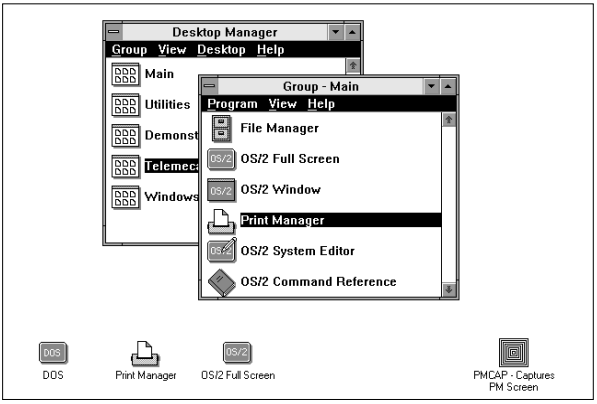
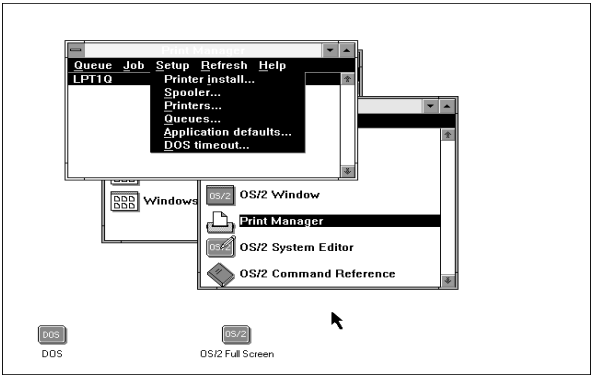
### 4.1-2 Printer Driver Configuration for OS/2 1.2/1.3

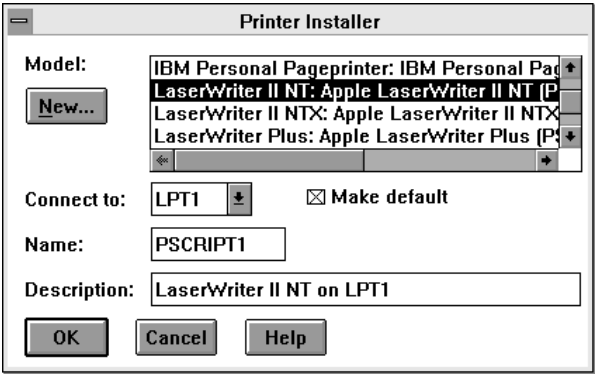
- Select the Print Manager by double clicking on its icon,




- Select Setup, then select Printer install,




- Select the appropriate printer driver for the Post-script printer to be used,
- Select port LPT1 and assign a name to the printer,
- Click on OK to confirm.

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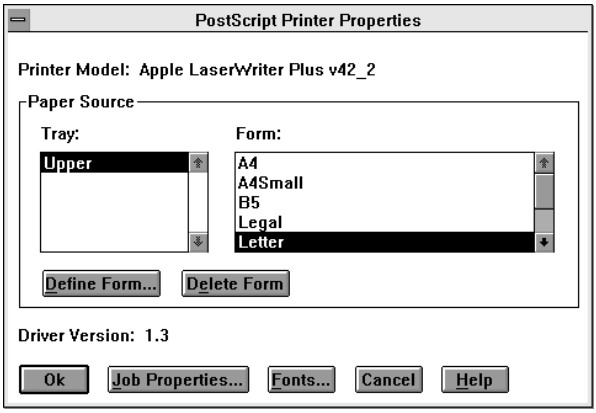
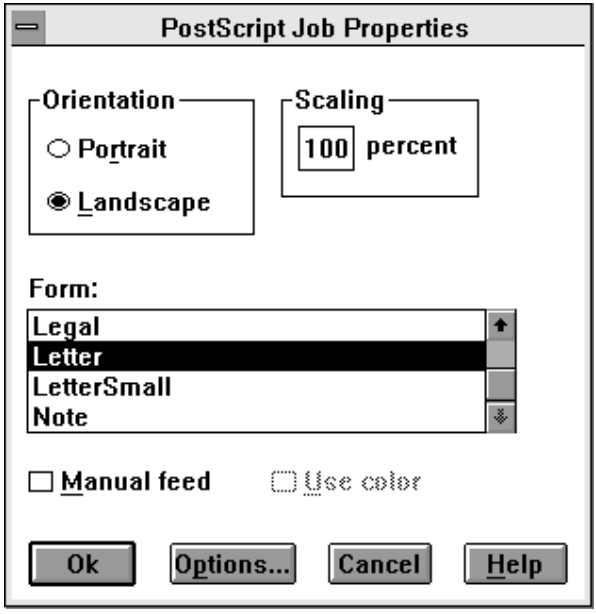
- Select the options shown opposite,
- Click on the Job Properties button,




- Select the options shown opposite,
- Click on Ok to confirm.

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### 4.1-3 Printer Driver Installation for OS/ 2.1

Refer to the OS/2 Version 2.1 User's Guide, Section 16 - Printers and Plotters.

### 4.1-4 Printer Driver Installation for OS/2 2.1

The parameters defined for a printer driver are known as printer characteristics and define the hardware configuration of the printer. The parameters to select are listed below:

- Paper format : A4 ,
- Presentation : Landscape
- Scale : 100%,
- Font : Courrier.

To define the printer characteristics, refer to the OS/2 Version 2.1 User's Guide, Section 16 - Printers and Plotters.

**Note**:
If the results obtained when printing are not satisfactory (shifted page layout, etc.), refer to the OS/2 Version 2.1 User's Guide, Section 28 - "Printing Errors" paragraph.

### 4.1-5 Example

FTX 507 QMS PS 810

**Microcomputer**

Telemecanique T FTX 507 55 11E microcomputer with:
- 120 MB hard disk,
- 8 MB RAM memory.

**Printer**

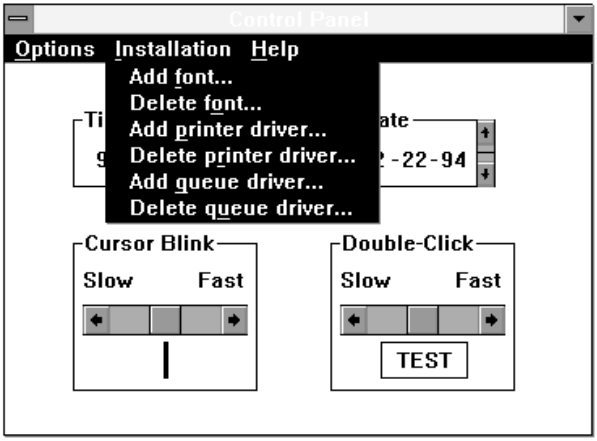
QMS PS 810 Postscript laser printer.

The FTX 507/Printer interface uses the parallel ports on the two devices. The printer is set-up as described in Sub-section 3.2-5.

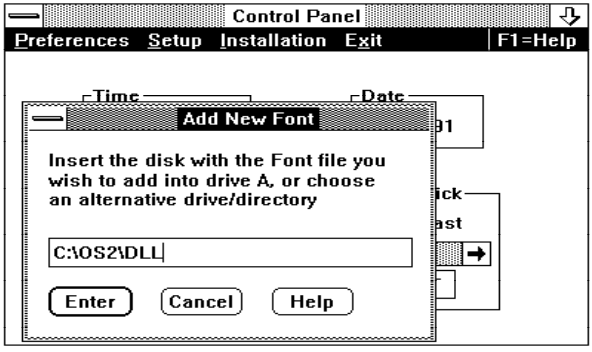
## 4.2 Courier Font Installation

### 4.2-1 For OS/2 1.2/1.3

- Open the Desktop Manager window and select the Utilities Group,
- From the Utilities Group menu, select the Control Panel,
- From the Control Panel, select the Installation menu,
- Select the Add Font action which displays the screen shown below:




- Insert the printer driver diskette,
- Select the Enter button to list all of the fonts available on the diskette.

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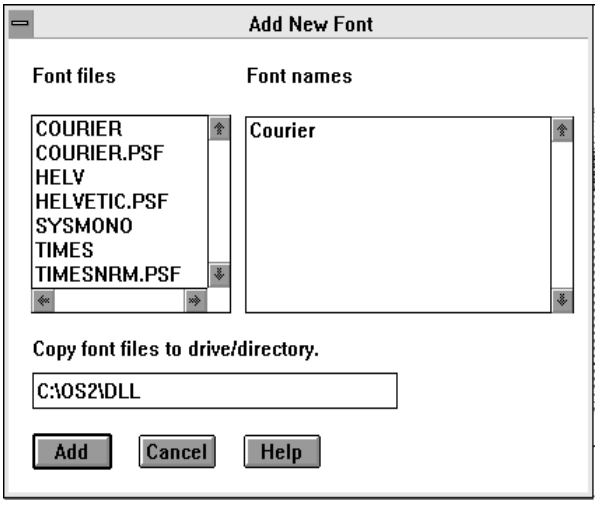
- Select the file with the courrier font from the list displayed.
- Select **Add**.




### 4.2-2 For OS/2 2.1

If the courrier font was not installed when OS/2 2.1 was installed, proceed as described below:

- Select the "**OS/2**" icon,
- Select the "**System Configuration**" icon,
- Select the "**Custom Installation**" icon,
  - Skip the first screen by selecting **OK**,
  - From the second screen, select "**Fonts**" and click on the "**Next**" button,
  - Insert the OS/2 2.1 installation diskette and follow the instructions.

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## 4.3 Generating Text Files in Word 5.0 or Word for Windows

In order to integrate Postscript (.PSC) files generated with Microsoft Word 5.0 or Encapsulated Postscript (.EPS) files generated with Microsoft Word for Windows into XTEL-DOC General Information paragraphs, select the following page layout values from the Word 5.0 Format Division Margins menu:

- To select A4 Landscape (i.e. Horizontal) format:
  - Page length = 21 cm
  - Page width = 29.7 cm
- To avoid exceeding the correct page size and to leave room for the footer:
  - Top margin ≥ 0 cm
  - Bottom margin ≥ 5 cm
  - Left margin + Gutter ≥ 2 cm
  - Right margin ≥ 2 cm
  - Even/Odd margins: No

In Word 5.0 select "Postscra" from the Output Options menu in order to generate a Postscript file that can be used by XTEL-DOC.

**Note:**
If styles are used to format the document, ensure that they are present before printing the file to disk.

## 4.4 Storing Documentation Files on Diskette

To store XTEL-DOC documentation files, the context must be stored too (especially when managing different documentation file versions).

**Backing-up and Restoring a Project to/from a diskette in X-TEL:**
The complete procedure for backing-up and restoring a project to/from a disk are described in the X-TEL Software Workshop documentation (TXT DM XTEL V5E), Divider C, Sub-section 3.2-2.

**Backing-up a Station to a diskette:**

- First identify the directories where the required Station files are stored,
- Open a full-screen OS/2 session,
- Type **BACKUP**
  **BACKUP** D:\XPROPRJ\project_name\station_name A:/F/S

**Note:** /F is not required if the inserted diskettes are already formatted.

Once the command has been executed, copy to a diskette the:
- station_name.sta file.

E.g.: COPY D:\XPROPRJ\project_name\station_name.sta A:

**Restoring a Station from a diskette:**

- First identify the directories where the required Station files are stored,
- Open a full-screen OS/2 session,
- Type **RESTORE**
  **RESTORE** A: D:\XPROPRJ\project_name\station_name/S

Once the command has been executed, restore from the diskette the:
- station_name.sta file.

E.g.: **COPY** A: D:\XPROPRJ\project_name\station_name.sta

**Backing-up and Restoring a Project to/from a diskette in MINI X-TEL:**
The complete procedure for backing-up and restoring a project to/from a disk are described in the MINI X-TEL Software Workshop documentation (TXT DM BJR V5E), Divider C, Sub-section 1.2-7 and 1.2-8.

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