Reader
User Guide
ISO-FFNB Series Reader

ISO-FFNB-8050	2 X Neck Bar Antenna's with 8030/50 Keypad
ISO-FFWNB-8050	2 X Neck Bar Antenna's, Wand Antenna with 8030/50 Keypad
ISO-FFNB-9060	2 X Neck Bar Antenna's with 9060 Keypad
ISO-FFNBW-9060	2 X Neck Bar Antenna's, Wand Antenna with 9060 Keypad

Version 1.00 14/01/2013

IMPORTANT!
This User Guide must be read in conjunction with Reader, prior to use.

©Copyright Aleis Pty Ltd 2013

ISO 9001 : 2000
REGISTERED FIRM

A1064AUS

Aleis Pty Ltd
ACN 130 754 826
www.aleis.com Ph: 07 46685942

TABLE OF CONTENTS

Regularity Notices and Conformity 4

ISO-FFNB Series Reader Instructions 5

1.0 The Aleis ISO-FFNB Series System 6

2.0 Preparation for Use 7

3.0 Warnings 7

4.0 Care and Maintenance 7

5.0 Methods of connection 8

5.1 Direct connection with your scale indicator: 8
5.2 Direct connection with your computer: 8
5.3 Interface Protocol 8

6.0 Optional Power 9

7.0 Using a Power Supply 9

8.0 The ISO-FFNB8050 Keypad 9

9.0 ISO-FFNB8050 Reader Method of Use 9

9.1 How to: Read & Store RFIDs 10
9.2 How to: Create Sessions using menu. 10
9.3 How to: Create Sessions using F1 and F2 Keys. 10
9.4 How to: Upload RFIDs into the Reader 10
9.5 How to: Compare RFIDs in the Reader 11
9.6 Formatting the File System 13
9.7 How to Format your reader 13

10.0 ISO-FFNB8050 Menu Tree 14

10.1 Session Menu 14
10.2 Read Setup Menu 15
10.3 System Setup Menu 16
10.4 Reader Information Menu 17
10.5 Memory Status Menu 17

11.0 ISO-FFNB8050 Audio and Visual Alerts 18

12.0 ISO-FFNB8050 Menu 19

12.1 Session 19
12.11 New 19
12.12 Send to PC 19
12.13 Clear 19
12.14 Select 19
12.2 Read Setup 19
12.21 Load/Save Profile 19
12.22 Comparison 19
12.23 Alert 19
12.24 Storage 19
12.25 Send 19
12.3 System Setup 20
12.31 Communications 20
12.32 Display 20
12.33 Buzzer 21
12.34 Sleep Timer 21
12.35 Read Timer 21
12.36 Load Defaults 21
12.37 Set Date/Time 21
12.38 RFM Settings 21
12.4 Reader Information 22
12.5 Memory Status 22

13.0 The ISO-FFNB9060 Qwerty Keypad 23

14.0 ISO-FFNB9060 Reader Methods of Use 24

14.1 Record RFID No's only (no data entry) 24
14.2 Quick Data Entry – One only use of Template 24

14.3 Templates....26
14.4 Data Entry using Function Keys for a pre made Template....29
14.5 How to: Upload RFIDs into the Reader....30
14.6 How to: Compare RFIDs in the Reader....31
14.7 Formatting the File System....32
2.8 How to Format your reader....32

15.0 ISO-FFNB9060 Menu Tree....33

15.1 Session Menu....33
15.2 Read Setup Menu....34
15.3 System Setup Menu....35
15.4 Reader Information Menu....36
15.5 Memory Status Menu....36

16.0 ISO-FFNB9060 Audio and Visual alerts....37

17.0 ISO-FFNB9060 Menu....38

17.1 Session....38
17.11 New....38
17.12 Data Entry Setup....38
17.13 Data Entry Locking....38
17.14 Templates....38
17.15 Send to PC....38
17.16 Clear....38
17.17 Change Name....38
17.18 Select....38
5.2 Read Setup....38
17.21 Load/Save Profile....38
17.22 Comparison....38
17.23 Alert....38
17.24 Storage....39
17.25 Send....39
17.3 System Setup....39
17.31 Communications....39
17.32 Display....40
17.33 Buzzer....40
17.34 Sleep Timer....40
17.35 Read Timer....40
17.36 Load Defaults....40
17.37 Set Date/Time....41
17.38 RFM Settings....41
17.4 Reader Information....41
17.5 Memory Status....42

18.0 ISO-FFNB SERIES Reader Specifiactions....42

19.0 Aleis Conditions of Sale....43

REGULARITY NOTICES AND CONFORMITY

USA – FCC

Information to the user (FCC Part 15.105)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encourage to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Modification warning (FCC Part 15.21)

Warning: Any changes or modifications not expressively approved by Aleis could void the user's authority to operate this equipment.

IC Canada

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is Subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Europe CE

This device has been tested and meets the Electromagnetic Compatibility requirements for EN300 330

Australia and New Zealand - C-Tick

This device has been tested and meets the Electromagnetic Compatibility requirements for CISPR 11

Antenna Warning

This device has been designed to operate with the antennas listed below. The ISO-FFNB Series Readers are only approved with the detachable antennas below. In accordance with RSS-GEN Issue 2 June 2007 Section 7.1.4 and FCC Part 15.21, antennas not included in this list are strictly prohibited for use with this device.

Aleis Part Number	Antenna Length Type	Antenna Description
4022	300mm	Wand Antenna
4023	500mm	Wand Antenna
4035(L)	900mm	Neck Bar Antenna
4035(R)	900mm	Neck Bar Antenna

Important User Instructions

ISO-FFNB SERIES READER INSTRUCTIONS

IMPORTANT

Must be read prior to using system

The following instructions must be wholly adhered to or permanent damage to the antenna/reader and/or permanent data loss can occur. Non-conformance to the handling and operating instructions will immediately void all warranties for the antenna/reader and software.

1. Have only one system at a time switched on unless Master/Slaved.
2. Do not hose or submerge antenna/reader in water.
3. Use only a very lightly damp cloth to clean antenna/reader.
4. Do not use chemicals to clean antenna/reader.
5. Do not drop reader boxes as electronics are contained within.
6. All boxes with seals are to be kept sealed.
7. Do not remove any VOID stickers from readers.
8. Do not drill holes in antenna.
9. Aleis Conditions of Sale apply.

1.0 THE ALEIS ISO-FFNB SERIES SYSTEM

The ISO-FFNB series is available in different configurations

ISO-FFNB-8050	2 X Neck Bar Antenna's and 8030/50 Keypad
ISO-FFWNB-8050	2 X Neck Bar Antenna's, Wand Antenna and 8030/50 Keypad
ISO-FFNB-9060	2 X Neck Bar Antenna's and 9060 Keypad
ISO-FFNBW-9060	2 X Neck Bar Antenna's, Wand Antenna and 9060 Keypad

2.0 PREPARATION FOR USE

When you have mounted your Aleis ISO-FFNB Series Reader, and you are ready to use it, please ensure the following steps are closely followed:

When inserting or attaching a new electronic RFID device into or on an animal, keep all other electronic RFID devices a minimum of 3 meters away from the Aleis ISO-FFNB Series Reader. This will ensure you only read the device you are inserting or attaching.

Keep computers a minimum of 3 meters away from the Aleis ISO-FFNB Series Reader.

Securely fasten the computer lead into your scale indicator or computer – screw the connectors into place.

3.0 WARNINGS

Never open the reader box.

Never drill the antenna.

Some magnetic fields will affect reading, such as some computers, computer monitors, electric motors and generators. This may affect your read range and therefore your reader is being interfered with.

4.0 CARE AND MAINTENANCE

Keep all spare electronic RFID devices away from the Aleis ISO-FFNB Series Reader.

Protect computer and power leads from animals if the system is left in the yards.

Treat the system with care; Aleis has built this system for the cattle yards, but it is an electronic unit and must be treated accordingly.

Keep all reader connectors clean and screw covers on fittings when not in use.

MOST IMPORTANT: Aleis' customers are our highest priority, and if you have any queries, please feel most welcome to contact your Aleis distributor.

5.0 METHODS OF CONNECTION

There are two general methods of connecting your Aleis ISO-FFNB Series System.

5.1 Direct connection with your scale indicator:

The Aleis ISO-FFNB Series Reader is compatible with all scale indicators accepting the standard RFID format from a reader. You may need to contact your scale indicator manufacturer for setup instructions.

There is no setup required on the reader end – simply plug in your reader to your scale indicator by plugging the 9-pin female plug into the 9-pin male plug on your scale indicator.

5.2 Direct connection with your computer:

The ISO-FFNB Series Reader can also link directly with your computer. The Aleis ISO-FFNB Series Reader is compatible with all major herd management programs accepting a standard real-time RFID from a reader. You may need to contact your herd management software provider for exact setup instructions.

There is no setup required on the reader end – simply plug in your reader to your computer by plugging the 9-pin female plug into the 9-pin male plug on the back of your computer.

5.3 Interface Protocol

When you are setting up the ISO-FFNB Series Reader to read directly into your scale indicator or computer, you may be asked for the 'interface protocol' by the scale indicator manufacturer or software provider. These settings are as follows:

Baud Rate: 9600
Data Bits: 8
Parity: None
Stop Bits: 1
Communication: ASCII Serial

6.0 OPTIONAL POWER

Only use high quality regulated linear power supplies or solar panels. Please contact Aleis with any queries, you may have.

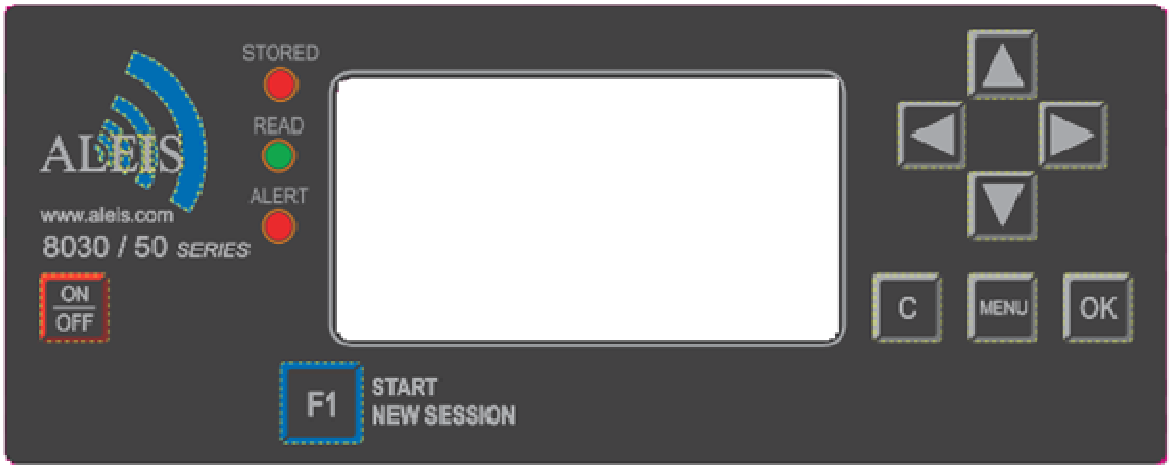
Some switch mode power supplies are NOT suitable and must not be used.

7.0 USING A POWER SUPPLY

If you purchased an ISO-FFNB System without a power supply, then you will need to use a power supply to power the reader. An external 12 volt battery can be used, or a regulated linear power supply. ***DO NOT USE A SWITCH MODE POWER SUPPLY*** as some switch mode power supplies can interfere with the performance of the system.
The power supply must be approved for use in your country and meet all your countries emission and standard requirements.

If you purchased an ISO-FFNB System with a power supply you must follow the manufactures requirements for the power supply supplied with the system. If the power supply is marked "*Indoor Use Only*" you must mount the power supply in a dry indoor location and in a safe location. Always follow your country's/state electrical requirement's.

8.0 THE ISO-FFNB8050 KEYPAD



9.0 ISO-FFNB8050 READER METHOD OF USE

Helpful Hints

- *First, it is recommended to go to Menu Setup diagram in User Guide, then go to MENU key on reader, and become familiar with the settings in the reader while looking at the User Guide.*
- *Pressing C once takes you back to previous step.*
- *Keep session numbers recorded somewhere so you know which cattle are recorded in individual session numbers.*
- *Screen will automatically turn off if not used within 30 minutes. (Menu selectable)*

9.1 How to: Read & Store RFIDs

1. Turn the Reader ON.
2. When using the wand and wave the wand past the RFID device - ear tag or rumen pellet. When reading rumen pellets, simply wave the wand in a reverse 'L' pattern behind the front leg of the animal, or in front of the brisket.
3. When you have finished reading, you may turn the Reader OFF, and download it later at your PC, or you may start a new session and read another group of animals.

9.2 How to: Create Sessions using menu.

1. To start a new session to read another group of animals, simply press the MENU button.
2. The word 'Session' will be highlighted, press the OK button.
3. The word 'New' will be highlighted, press the OK button.
4. Select Yes by using the left arrow key, then press the OK button. (If previous sessions are empty, you will not be able to create a new session)
5. Press the C button *(located to the left of the MENU button)* until you return to the main reading screen, and read the next group of cattle.

9.3 How to: Create Sessions using the F1 Key.

1. Press F1 to start new session. Four Beeps will be heard.

Note: you can start a new session even if the one you have ended has no RFID devices in it.

9.4 How to: Upload RFIDs into the Reader

The feature of uploading RFIDs into the reader is to allow you to find particular RFIDs that you need to identify. For example, if you need to find a particular animal that was treated with a certain medicinal treatment, you can upload the RFID into the reader. When you read the animal with that RFID, the reader will alert you with a long series of beeps so that you will know you have found the animal you were looking for.

To use this feature, there are two steps you will need to perform:

1. Create a file to upload into the reader.
2. Upload the RFIDs into the reader.

Before starting you will need:

1. Aleis DataLink installed on your computer.
2. A working COM port – you can check this by turning your reader on, and then opening Aleis DataLink. Down the bottom right corner of the Aleis DataLink screen, you should see that the software has connected to a particular unit.
3. A list of RFIDs that you want to put into the reader.

Step 1: Creating a file to upload into the reader.

Creating the file to upload into the reader is very easy. You can do this in Microsoft Excel or Wordpad or Notepad. All you need to do is have a list of RFIDs with the word TAG as the first entry, ie at the top of the list. It must look like this:

TAG
982 000023661452
982 000016654299
982 000027909419
982 000024909416
982 000009161045
982 000024566253
982 000015883922
982 000030781909

If you are using Microsoft Excel, then simply put this in Column A, with the word TAG in Row 1.

Once you have done this, you will need to save this as a text file (*.txt). It is very important that you save this as a text file or the operation will not work. Hint: When you save this, give it a name that is five letters or less.

Step 2: Upload the files into the reader.

1. Open up Aleis DataLink.
2. Once the software has found the reader, click on the Open button located at the left side of the DataLink screen (there is a big yellow manilla folder on the button).
3. Find the file that you created, and click on the open button.
4. You will see that file name listed in the main screen of Aleis DataLink where the session names and numbers are normally displayed.
5. Click on that file name.
6. Now click on the Upload button located at the left side of the DataLink screen.
7. You will be asked to enter a name. If you want to change the name, go ahead and type in what you would like, then click on the OK button.
8. When it has been successfully uploaded, you will see at the bottom left of the DataLink screen, the words, “Upload Complete”.

9.5 How to: Compare RFIDs in the Reader

You want to ensure that every time you read an RFID, the reader is checking it against the list of RFIDs you have uploaded into the reader. To make this happen, do the following:

1. Ensure the reader is turned on.
2. Start a new session – as per your requirements . . . so you will be using a template that you are planning to do your work with.
3. Once you have started the new session, and you are in the main reading screen, press the MENU button.
4. Scroll down to **Read Setup** and press the OK button.
5. Scroll down to **Comparison** and press the OK button.
6. Scroll down to ☐ **Session ( )** and press the OK button.
7. Scroll back to the name you saved the uploaded file as and press the OK button.
8. Press the C button (located beside the MENU button).
9. The reader will then reboot – now press the MENU button again.
10. Scroll down to **Read Setup** and press the OK button.

11. Scroll down to **Alert** and press the OK button.
12. Ensure **Condition** is highlighted and press the OK button.
13. Scroll down to ☐ **On Match** and press the OK button – you will see a tick appear in the box.
14. Press the C button (located beside the MENU button).
15. Scroll down to **Action** and press the OK button.
16. Scroll down to ☐ **Msg, LEDs, Buzzer** and press the OK button – you will see a tick appear in the box.
17. Press the C button (located beside the MENU button).
18. Scroll down to **Duration** and press the OK button.
19. Choose the setting you want and press the OK button. 'Until Keypress' means that the reader will continue to beep and flash the LEDs until any key on the reader is pressed.
20. Press the C button (located beside the MENU button) three times – until you see the main reading screen.
21. Turn the reader off and then back on.
22. The reader is now ready to use and will compare the RFIDs you read against the list you uploaded.

Note: When you upload another new list of RFIDs into the reader, in Step 6 of the above, you will need to tick the box ☐ **Current Session and then scroll back down and tick the ☐ **Session ( )** again to reactivate the reader to search

9.6 Formatting the File System

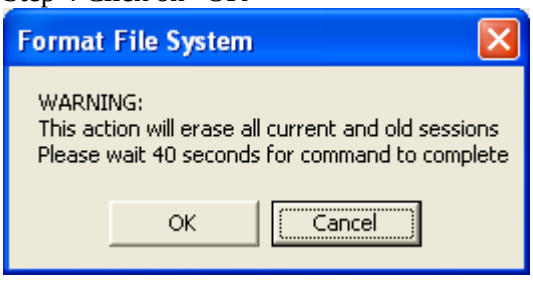
Formatting of the file system is very important to keep your reader operating at its maximum performance. Once the reader has read and stored a lot of tags eg 40000+ you may notice a slow down in its performance when storing and recalling data. This is similar to your PC when the Hard Drive gets full. When you clear the reader it doesn't actually remove the data so you can retrieve it if you accidentally have cleared the reader. When a "Format file system" is done the data then is lost.

Formatting of the file system should be done every 2-4 months for heavy users or 4-6 months for light users.
Before formatting the file system make sure you have saved any data in the reader. After formatting the data is **NOT** recoverable.
When the reader is formatted your templates will also be cleared so note down the names and the fields in the template so you can set them up again.

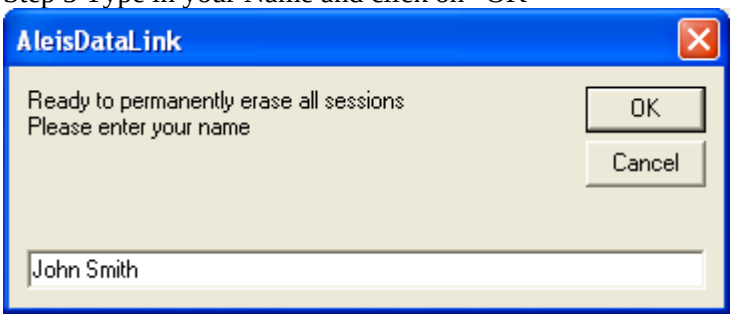
9.7 How to Format your reader

Note: Read above "Formatting File System in Reader" first

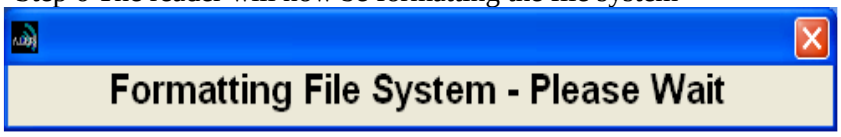
Step 1 Open DataLink
Step 2 Click on "Setup".
Step 3 Click on "Format file system"
Step 4 Click on "OK"



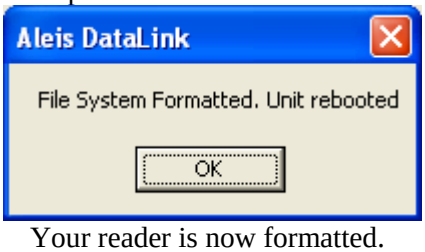
Step 5 Type in your Name and click on "OK"



Step 6 The reader will now be formatting the file system



Step 7 Click on the "OK"



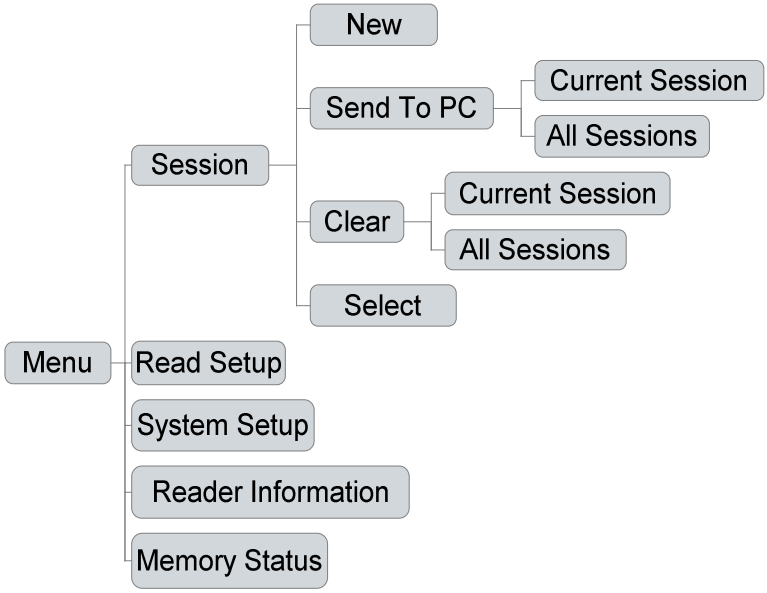
Your reader is now formatted.

10.0 ISO-FFNB8050 MENU TREE

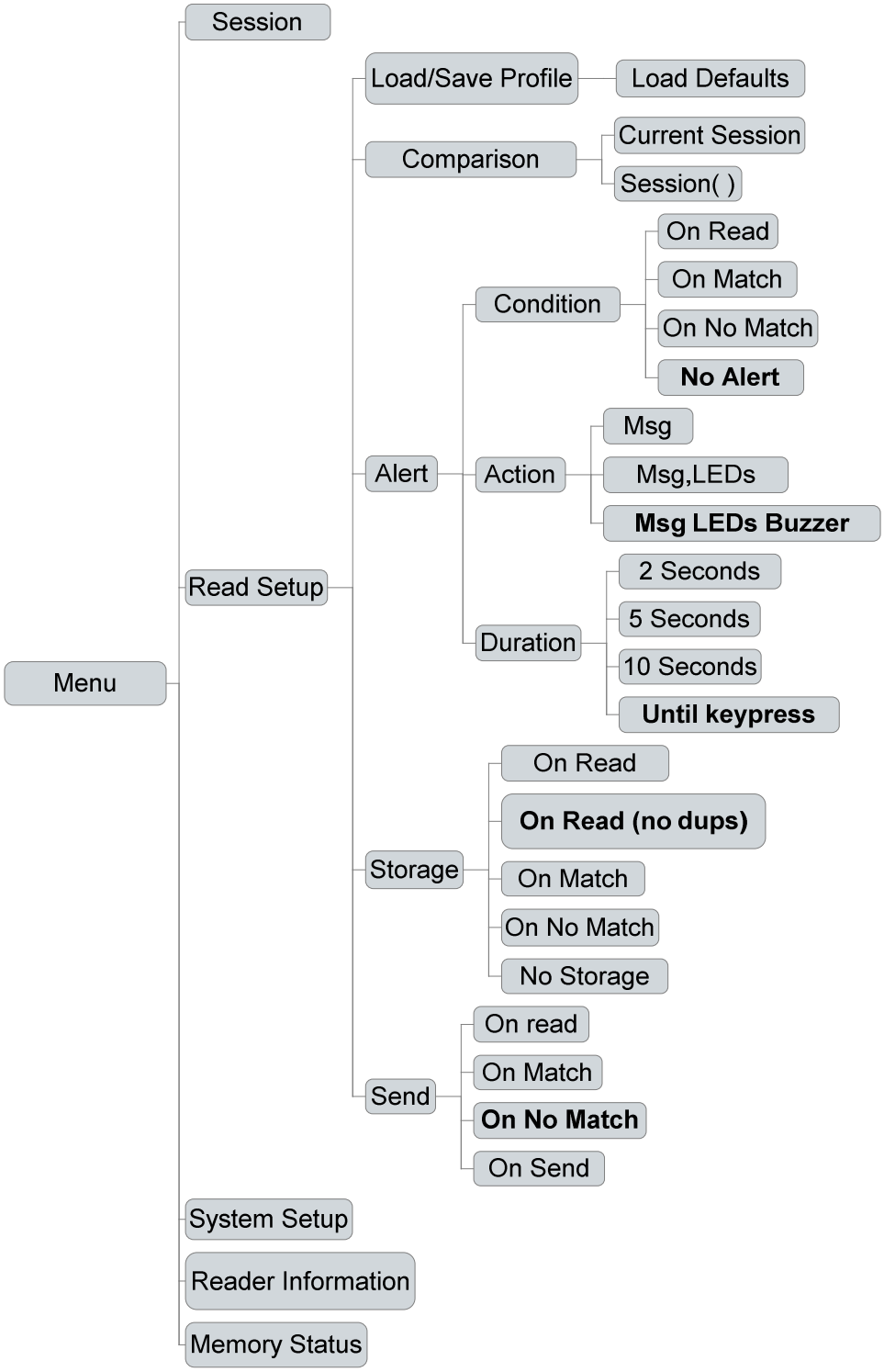
The readers menu has 5 main menu and several sub menu items

Session
Read Setup
System Setup
Reader Information
Memory Status

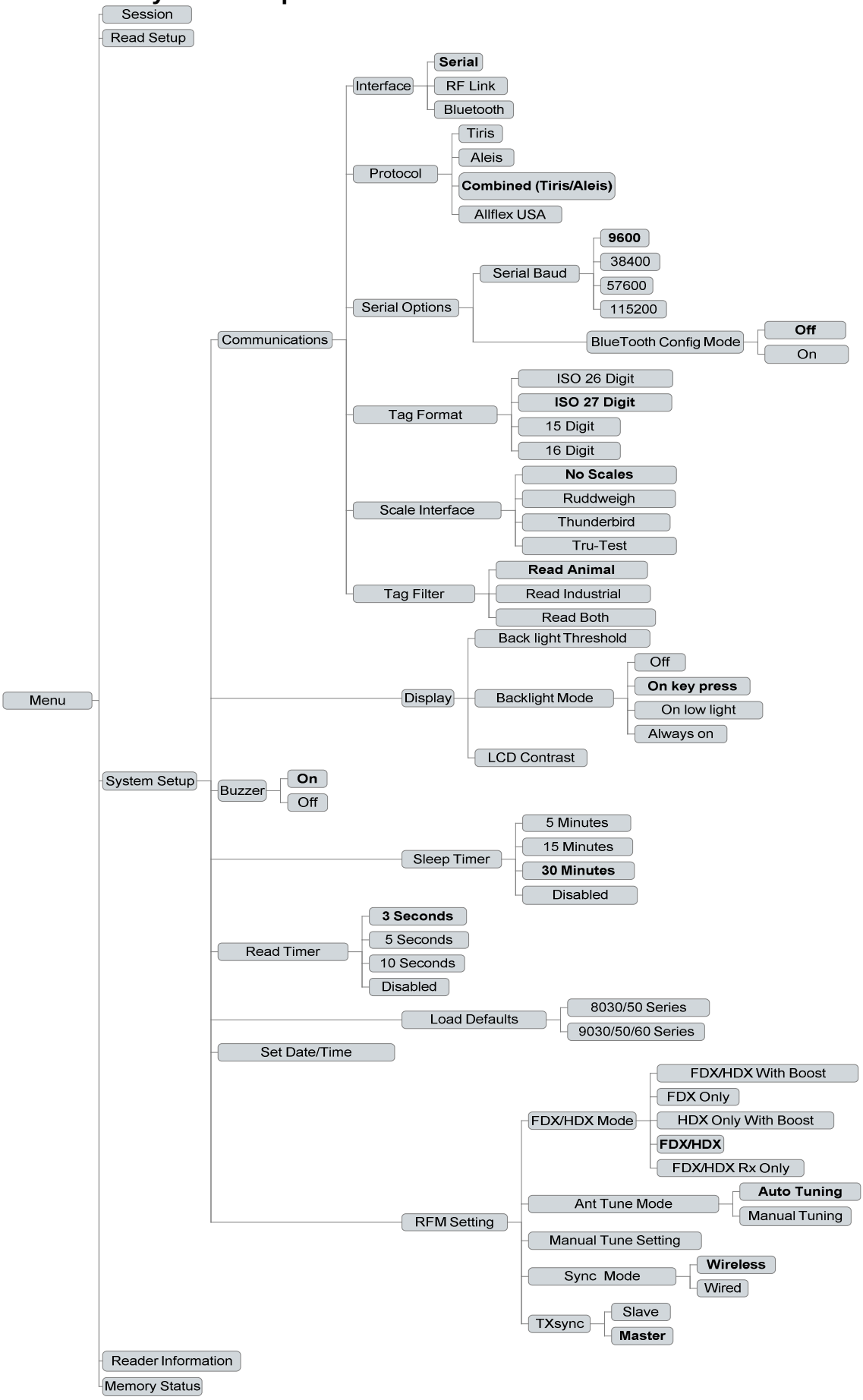
10.1 Session Menu



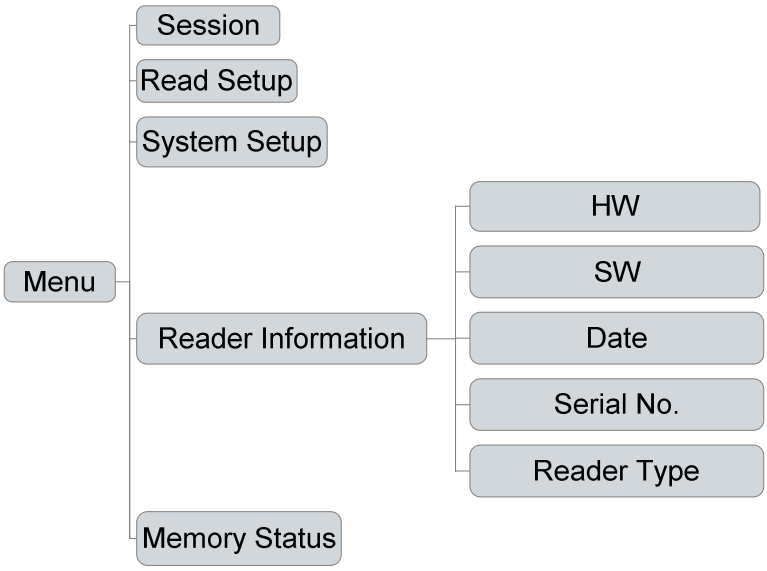
10.2 Read Setup Menu



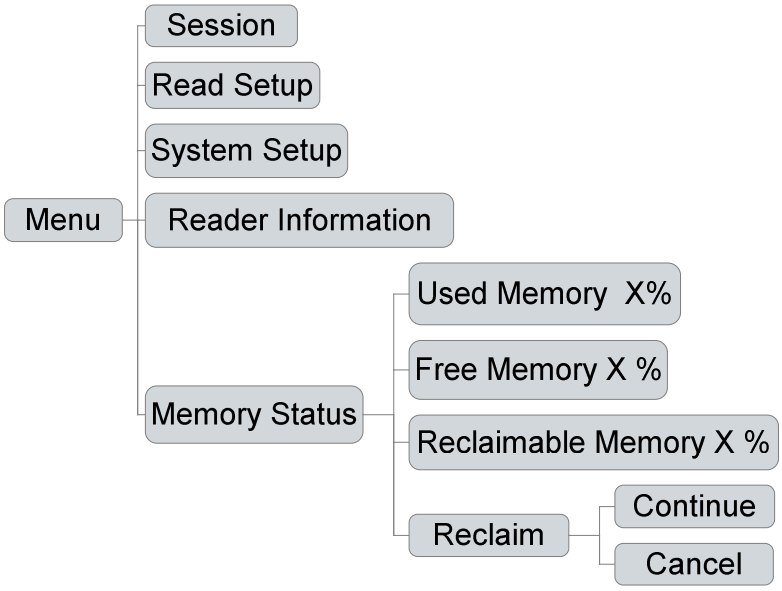
10.3 System Setup Menu



10.4 Reader Information Menu



10.5 Memory Status Menu



11.0 ISO-FFNB8050 AUDIO AND VISUAL ALERTS

Features	**Buzzer**	**LCD Display**	**LED's at Top of LCD**	**Alert LED's – 2 on the top left side of the screen.**
Valid READ	One beep	Current RFID number, eg. 971 000000002861, at top of screen	READ LED blinks once	
Valid READ & ID STORED	Two beeps	Current RFID number, eg. 971 000000002861, at top of screen, and counter at bottom right of screen will increase.	READ and STORED LED's blink once	
No ID Read	One long beep (after read on time out)	NO RFID READ		
No RF Signal being received.	Two very quick beeps (every 30 seconds)	(Flashing)		
Battery Charge at Low Level	Three very quick beeps (every 60 seconds)			
Battery Charge at Critically Low Level	Constant Beeping	BATTERY LOW		Flashes as unit is about to turn off.

Legend for LCD Visual Displays.

Battery Level Indicator

- Fully Charged
- Half Charged
- No Charge—unit will turn off

BlueTooth

BT **(Solid)** Connected

BT **(Flashing)** Not Fitted or BT Not ready

RF Signal Indicator

Connected

(Flashing) No Connection

12.0 ISO-FFNB8050 MENU Main Menu (Reader selection choices)

12.1 Session

12.11 New

Starts a New Session

12.12 Send to PC

Sends the RFIDs in the memory to the PC

There are two options:

- Current Session
- All Sessions

12.13 Clear

Clears the readers memory. There are two options:

- Current Session
- All Sessions

12.14 Select

- Selects the session on the reader . Any RFIDs read will be stored in the session selected

12.2 Read Setup

12.21 Load/Save Profile

Load defaults – (Resets Read Setup to factory defaults)

12.22 Comparison

Compares RFIDs read with

- Current Session
- Session (Select which session number you want to compare RFID's with)

12.23 Alert

Alert Options

The Condition Sets the alert condition when a RFID is read.

There are 4 Alert Conditions :

- On Read
- On Match
- On No Match
- No alert

Action

Sets the Alert Action There are 3 options:

- Msg = Message on screen
- Msg,LED's = Message & Lights
- Msg, LED's, Buzzer = Message, Lights & Buzzer

Duration

Sets the Alert Duration. There are 4 options

- 2 Seconds
- 5 Seconds
- 10 Seconds
- Until Keypress

12.24 Storage

Sets the store Condition when a RFID is read There are 5 options

- On Read
- On Read (No Duplicates)
- On Match
- On No-Match
- No Alert

12.25 Send

Sets the Send Condition when a RFID is read. There are 4 options

- On Read

- On Match
- On No-Match
- No Send

12.3 System Setup

12.31 Communications

Interface

Sets the interface the RFID is send out when a tag is read

- Serial
- RF Modem
- Bluetooth

Protocol

Sets the protocol string when a RFID is read or when communicating with the reader

- Tiris
- Aleis
- Combined (Tiris/Aleis)
- Allflex USA

Serial Options

Serial Baud

Sets the Baud Rate for the serial output only

- 9600
- 38400
- 57600
- 115200

BlueTooth Config Mode

- Off
- On

Tag Format

Set the lentgh of the RFID string

- ISO 26 Digit
- ISO 27 Digit
- 15 Digit
- 16 Digit

Scale Interface

Sets scale type, overrides Tag Output Format, Serial Baud Rate, and Download Format to suit the scale's requirements.

- No Scales
- Ruddweigh
- Thunderbird
- Tru-Test

12.32 Display

Backlight Threshold

(Select required lighting Eg 1 = always bright. 16 = will come on when very dark. Subject to Backlight Mode selection below)

Backlight Mode

Sets the condition when the Backlight comes on.

- Off
- On key-press
- On low-light
- Always On

LCD Contrast

(Select required contrast Eg 90 = light contrast. 120= very dark. Subject to viewing angle)

12.33 Buzzer

Turns the Buzzer On/Off

- Off
- On

12.34 Sleep Timer

Sets the Sleep Timer. The unit will turn off to save battery power if it is not used in the selected time

- 5 Minutes
- 15 Minutes
- 30 Minutes
- Disabled

12.35 Read Timer

Sets the read timer for handheld mode

- 3 Seconds
- 5 Seconds
- 10 Seconds
- Continuous

12.36 Load Defaults

Loads the defaults back to factory settings

- 8030/50 Series
- 9030/50/60 Series

12.37 Set Date/Time

-Sets Date and Time

12.38 RFM Settings

FDX/HDX Mode

Sets the readers FDX/HDX mode

- FDX/HDX With Boost
- FDX Only
- HDX Only With Boost
- FDX/HDX
- FDX/HDX Rx Only

Ant Tune Mode

Selects Auto or manual antenna tuing.

- Auto Tuning
- Maunual Tuning

Manual Tune Settings

When Manual tune is selected above you can change the tuning value to suit the read requirement, either for a maximum voltage (maximum range) or detune for a smaller read distance.

Sync Mode

Sets read cycle synchronization mode. Wired requires the TXS (orange) signal wires to be connected to the unit if TX sync is a slave.

- Wireless
- Wired

TxSync

Sets TX sync mode to master or slave unit (only applicable to Wired Sync Mode).

- Slave
- Master

12.4 Reader Information

(This is for technical assistance only & product identification)

Reader Info
Hardware: (Hardware Version)
Software: (Software Version)
Date: (Software Date)
Serial No: (Reader Serial Number)
Reader Type: (Aleis Reader Model)

12.5 Memory Status

Used Memory X%	Percentage of Used Memory
Free Memory X%	Percentage of Free Memory
Reclaimable Memory X%	Percentage of Recoverable Cleared Memory (old Sessions)

13.0 THE ISO-FFNB9060 QWERTY KEYPAD

Data Entry Keys

Function Keys

Directional Keys

Menu Keys

14.0 ISO-FFNB9060 READER METHODS OF USE

There are four general methods of reading and recording data. Please read each method and follow instructions covering the method you choose with your 9060 series system.

14.1 Record RFID No's only (no data entry)

1. Turn Reader **ON**.
   *(If a previous session is still on screen press **F3**, go to **step 4** below and start a new session)*

2. Read animal.

3. When finished reading, press **F3** and turn reader **OFF.** Data can be download later at PC, or, start a new session, and read another group of animals.

Start a new session:

1. To start a new session and read another group of animals, press **MENU**.

2. Select **Session** press **OK**.

3. **New** will be highlighted, press **OK**.

4. To read next group of cattle same as last group of cattle, press **down arrow** and select **Blank**.

5. Press **OK**. *(Note: A blank data entry box will appear – go to step 9)*

6. Press **C** *(located to the left of the MENU button)* to return to main reading screen.

7. Proceed to read next group of cattle.

14.2 Quick Data Entry – One only use of Template

Use this method when adding data to RFID's and not saving template etc. Example: For recording particular data on a rare occasion.

1. Turn Reader **ON**.

2. Press **MENU**.

3. **Session** will be highlighted, press **OK**.

4. **New** will be highlighted, press **OK**.

5. Press **down arrow** once to highlight the word **Blank**.

6. Press **OK**.
7. A table heading will appear.

Field	Default Data

*When setting up template there is no need to have a date field as this will record automatically and print with the report. There are **four** data fields available per template.*

8. **Field** column allows for three letters/numbers only for each field.
   If recording information for a, tag number, pregnancy result, weight, vaccination, dose rate or paddock. Abbreviate name to three letters only:
   Once name is typed, press **down arrow** and type in name for next field.

Field	Default Data
TAG	
WGT	
P/E	
PAD	

9. Press **right arrow** to move into second column under **Default Data**. Default Data is any data ***that will be the same*** for every animal read, leave box empty where data is to be changed for each animal. – use **up arrow** and **down arrow** buttons to move in the column. See the example below. *Note: Make sure **down arrow** button is pressed after typing is finished in each line – **including the last line.***

Field	Default Data
TAG	
WGT	
P/E	
PAD	**River**

10. When finished, press **C** *(located to left of MENU button)* to return to session screen.

11. Read first RFID device, press **F4**.

12. Type in data required – when finished typing first line of data, press **OK** to move to next line to enter next data. ***Note**: if data has been entered the same for every animal, it can still be edited if required – on particular line, press **Delete** or backspace arrow and remove what's not required and type data required.*

13. Press **OK** on last field, it will automatically return to main reading screen.

14. Quick guide to using **Data Entry Screen** when reading cattle:

Field	Default Data
Tag	*Type in Tag Number, press OK.*
Vac	5 in 1 - *Default Data, press OK.*
Dos	*Type in Dosage, press OK.*
Pad	River - *Default Data, press OK.*

Press **OK** on last field, it will automatically return to main reading screen to read next RFID.

15. When finished reading and recording data press **F3**, turn Reader **OFF** and download it later at PC, or start a new session and read another group of animals.

Start a new session:

16. To start a new session to read another group of animals, press **MENU**.

17. Session will be highlighted, press **OK**.

18. **New** will be highlighted, press **OK**.

Follow same instructions from beginning.

If same fields are required, select **Same Fields** instead of **Blank** (as in step 5)

14.3 Templates

- Setup New Template
- Lock Template
- Save Template
- Change Template
- Remove Template

Setup New Template

1. Press **MENU**.

2. **Session** is highlighted – press **OK**.

3. Press **down arrow** once to **Data Entry Setup.**

4. Press **OK**.

5. A table heading will appear.

Field	Default Data

*When setting up template there is no need to have a date field as this will record automatically and print with the report.There are **five** templates available and **four** fields available per template.*

6. **Field** column allows for three letters/numbers only for each field.
If recording information for a tag number, pregnancy result, weight, vaccination, dose rate or paddock. Abbreviate name to three letters only:
Once name is typed, press **down arrow** and type in name for next field.

Field	Default Data
TAG	
WGT	
P/E	
PAD	

7. Press **right arrow** to move into second column under **Default Data**. Default Data is any data ***that will be the same*** for every animal read, leave box empty where data is to be changed for each animal – use **up arrow** and **down arrow** buttons to move in the column. See the example below. *Note: Make sure **down arrow** button is pressed after typing is finished in each line – **including the last line.***

Field	Default Data

TAG	
WGT	
P/E	
PAD	**River**

8. When finished, press **C** *(located to the left of MENU button)* to return to the session screen.

Lock Template

9. From **Session** press **down arrow** to select **Data Entry Locking**.

10. Press OK.

11. By pressing **OK** in any box locks data to prevent it accidentally being changed when typing data into reader. An **X** appears in box when locked.

Some Examples:

Field	**HDR**	**DEF**	**DATA**
WGT	X		
TAG	X	X	
P/E	X		
PAD	X	X	X

Field Names created in **Data Entry Setup.**

HDR Locks **HDR** field so it cannot be accidentally changed when entering data. **(**These should always be locked with an **X**.)

DEF If **X** is in box, locks default data created in **Data Entry Setup**. (Default Data is any data ***that will be the same*** for every animal read.)

DATA Locks data field. When F4 is pressed after reading cattle if this has been locked the data cannot be changed. (This should only be locked with a **X** if default data is to remain the same for each animal.)

12. Once fields and data are locked to your requirements, press **C** button to go back one screen.

13. Template needs to be saved if it is to be used at another time.

Save Template

14. Press **down arrow** until **Templates** is highlighted.

15. Press **OK**.

16. **Save Template** will be highlighted – press **OK**.

17. Press **OK** on first **Empty** word, or any of the five templates.

18. Type in template name.

19. When finished press **OK**.

20. Message appears **Template Saved**, press **OK**.

21. Press **C** three times to return to main reading screen.

22. Reader is ready to read first group of animals.

23. This process can be carried out well before using the reader.

Change Template:

If template is made, and after using it, it needs to be updated or changed, make a new template as per these instructions, make all the changes, go to **Save Template** and highlight template being updated. Press **OK**, and reader will overwrite (replace) it with new updated template.

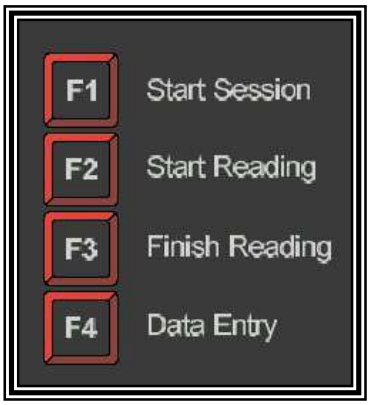
Remove Template:

Instead of highlighting the word 'Empty' when next template is saved, highlight template to be removed and press **OK**.

IMPORTANT:

The 9060 Series Reader always remembers the last template used, so if **Data Entry Locking** has been enabled on last template used, it will need to be unlocked before creating a new template. To unlock it, go to **Data Entry Locking**, highlight any box with an **X** in it, and press the **OK**.

14.4 Data Entry using Function Keys for a pre made Template



9060 Series Function Keys

9060 series Function Keys are designed to make entering data into reader simple and quick. The function of each key is explained to the right of that key, as an example, the F1 key is used to start a new session. These Function Keys are linked directly to created Templates in reader. It is important templates have been set up prior to reading animals and entering data as per this sheet.

1. Turn reader **ON**.
2. Assuming previous session is finished. Press **MENU**.
3. **Session** will be highlighted, press **OK**.
4. Press **down arrow** until **Templates** is highlighted.
5. Press **OK**.
6. Press **down arrow** until **Default Template** is highlighted.
7. Press **OK**.
8. Use arrow keys to highlight (tick) template you want, press **OK.**
9. Press **C** four times to return to main reading screen.
10. Press **F3** button to end current session.
11. Press **F1** to start a new session and enter any data required into Default Data section.
12. Press **F2** to start recording.
13. Read first animal
14. Press **F4** to enter data against animals (if entering data)
15. Once all required data has been entered, press **OK** button.
16. When finished reading all animals, press **F3** button to finish reading and end session.

14.5 How to: Upload RFIDs into the Reader

The feature of uploading RFIDs into the 9060 reader is to allow you to find particular RFIDs that you need to identify. For example, if you need to find a particular animal that was treated with a certain medicinal treatment, you can upload the RFID into the reader. When you read the animal with that RFID, the reader will alert you with a long series of beeps so that you will know you have found the animal you were looking for.

To use this feature, there are two steps you will need to perform three steps:

3. Create a file to upload into the reader.
4. Upload the RFIDs into the reader.
5. Set the reader up to check each RFID you read against the RFIDs you put into the reader.

Before starting you will need:

4. Aleis DataLink installed on your computer.
5. A working COM port – you can check this by turning your 9060 reader on, and then opening Aleis DataLink. Down the bottom right corner of the Aleis DataLink screen, you should see that the software has connected to a particular unit.
6. A list of RFIDs that you want to put into the reader.

Step 1: Creating a file to upload into the reader.

Creating the file to upload into the reader is very easy. You can do this in Microsoft Excel or Wordpad or Notepad. All you need to do is have a list of RFIDs with the word TAG as the first entry, ie at the top of the list. It must look like this:

TAG
982 000023661452
982 000016654299
982 000027909419
982 000024909416
982 000009161045
982 000024566253
982 000015883922
982 000030781909

If you are using Microsoft Excel, then simply put this in Column A, with the word TAG in Row 1.

Once you have done this, you will need to save this as a text file (*.txt). It is very important that you save this as a text file or the operation will not work. Hint: When you save this, give it a name that is five letters or less.

Step 2: Upload the files into the reader.

9. Open up Aleis DataLink.
10. Once the software has found the reader, click on the Open button located at the left side of the DataLink screen (there is a big yellow manilla folder on the button).
11. Find the file that you created, and click on the open button.
12. You will see that file name listed in the main screen of Aleis DataLink where the session names and numbers are normally displayed.
13. Click on that file name.
14. Now click on the Upload button located at the left side of the DataLink screen.
15. You will be asked to enter a name. If you want to change the name, go ahead and type in what you would like, then click on the OK button.
16. When it has been successfully uploaded, you will see at the bottom left of the DataLink screen, the words, "Upload Complete".

14.6 How to: Compare RFIDs in the Reader

You want to ensure that every time you read an RFID, the reader is checking it against the list of RFIDs you have uploaded into the reader. To make this happen, do the following:

23. Ensure the reader is turned on.
24. Start a new session – as per your requirements . . . so you will be using a template that you are planning to do your work with.
25. Once you have started the new session, and you are in the main reading screen, press the MENU button.
26. Scroll down to **Read Setup** and press the OK button.
27. Scroll down to **Comparison** and press the OK button.
28. Scroll down to ☐ **Session ( )** and press the OK button.
29. Scroll back to the name you saved the uploaded file as and press the OK button.
30. Press the C button (located beside the MENU button).
31. The reader will then reboot – now press the MENU button again.
32. Scroll down to **Read Setup** and press the OK button.
33. Scroll down to **Alert** and press the OK button.
34. Ensure **Condition** is highlighted and press the OK button.
35. Scroll down to ☐ **On Match** and press the OK button – you will see a tick appear in the box.
36. Press the C button (located beside the MENU button).
37. Scroll down to **Action** and press the OK button.
38. Scroll down to ☐ **Msg, LEDs, Buzzer** and press the OK button – you will see a tick appear in the box.
39. Press the C button (located beside the MENU button).
40. Scroll down to **Duration** and press the OK button.
41. Choose the setting you want and press the OK button. 'Until Keypress' means that the reader will continue to beep and flash the LEDs until any key on the reader is pressed.
42. Press the C button (located beside the MENU button).
43. If you want a message to appear as well, scroll down to **Message** and press the OK button.
44. Type the message you want to appear, then press the OK button.
45. You will see a message that says "Message Saved". Press the OK button.
46. Press the C button (located beside the MENU button) three times – until you see the main reading screen.
47. Turn the reader off and then back on.
48. The reader is now ready to use and will compare the RFIDs you read against the list you uploaded.

Note: When you upload another new list of RFIDs into the reader, in Step 6 of the above, you will need to tick the box ☐ **Current Session and then scroll back down and tick the ☐ **Session ( )** again to reactivate the reader to search

14.7 Formatting the File System

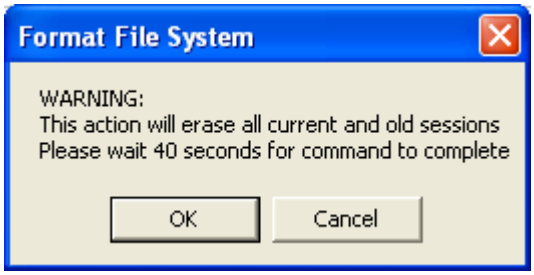
Formatting of the file system is very important to keep your reader operating at its maximum performance. Once the reader has read and stored a lot of tags eg 40000+ you may notice a slow down in its performance when storing and recalling data. This is similar to your PC when the Hard Drive gets full. When you clear the reader it doesn't actually remove the data so you can retrieve it if you accidentally have cleared the reader. When a "Format file system" is done the data then is lost.

Formatting of the file system should be done every 2-4 months for Heavy users or 4-6 months for light users. Before formatting the file system make sure you have saved any data in the reader. After formatting the data is **NOT** recoverable.
When the reader is formatted your templates will also be cleared so note down the names and the fields in the template so you can set them up again.

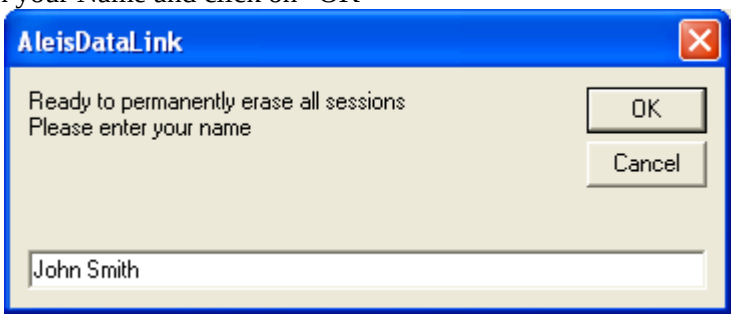
2.8 How to Format your reader

Note: Read above "Formatting File System in Reader" first

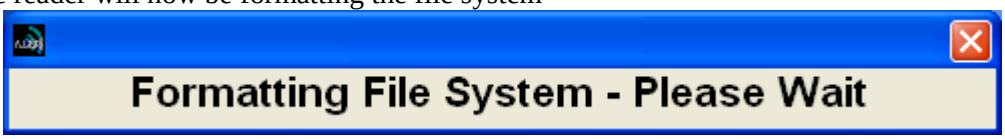
Step 1 Open DataLink
Step 2 Click on "Setup".
Step 3 Click on "Format file system"
Step 4 Click on "OK"



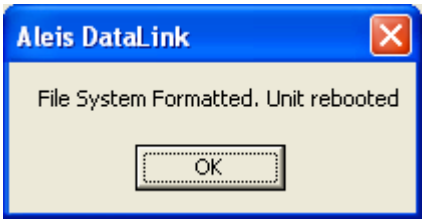
Step 5 Type in your Name and click on "OK"



Step 6 The reader will now be formatting the file system



Step 7 Click on the "OK"



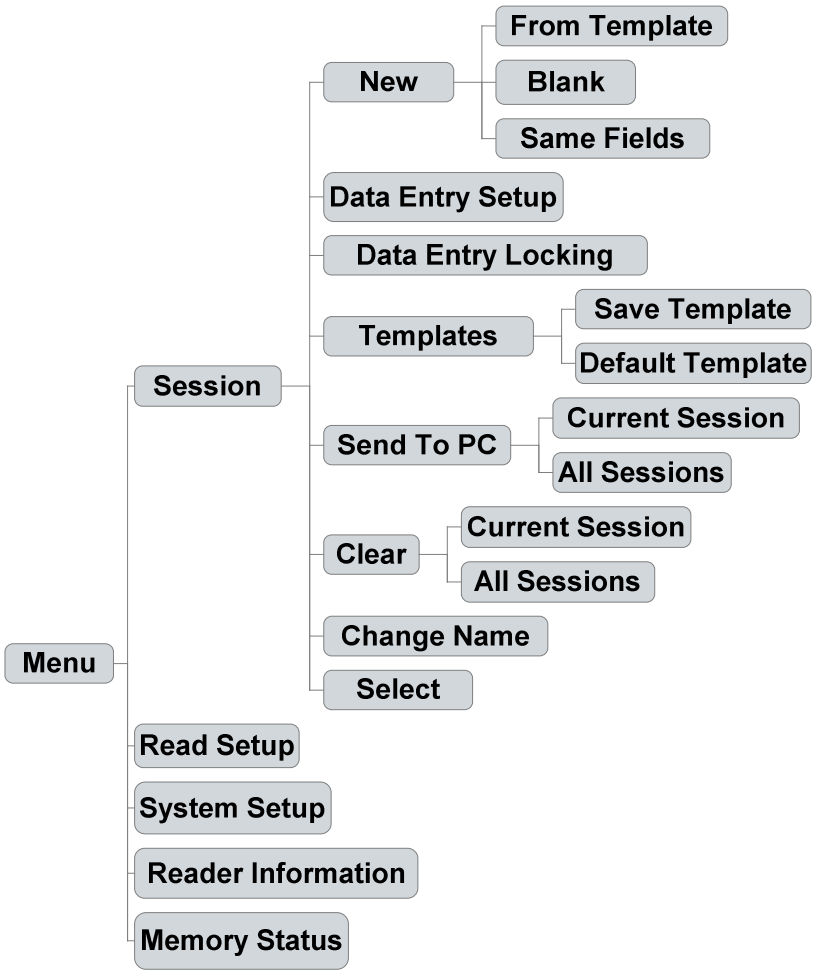
Your reader is now formatted.

15.0 ISO-FFNB9060 MENU TREE

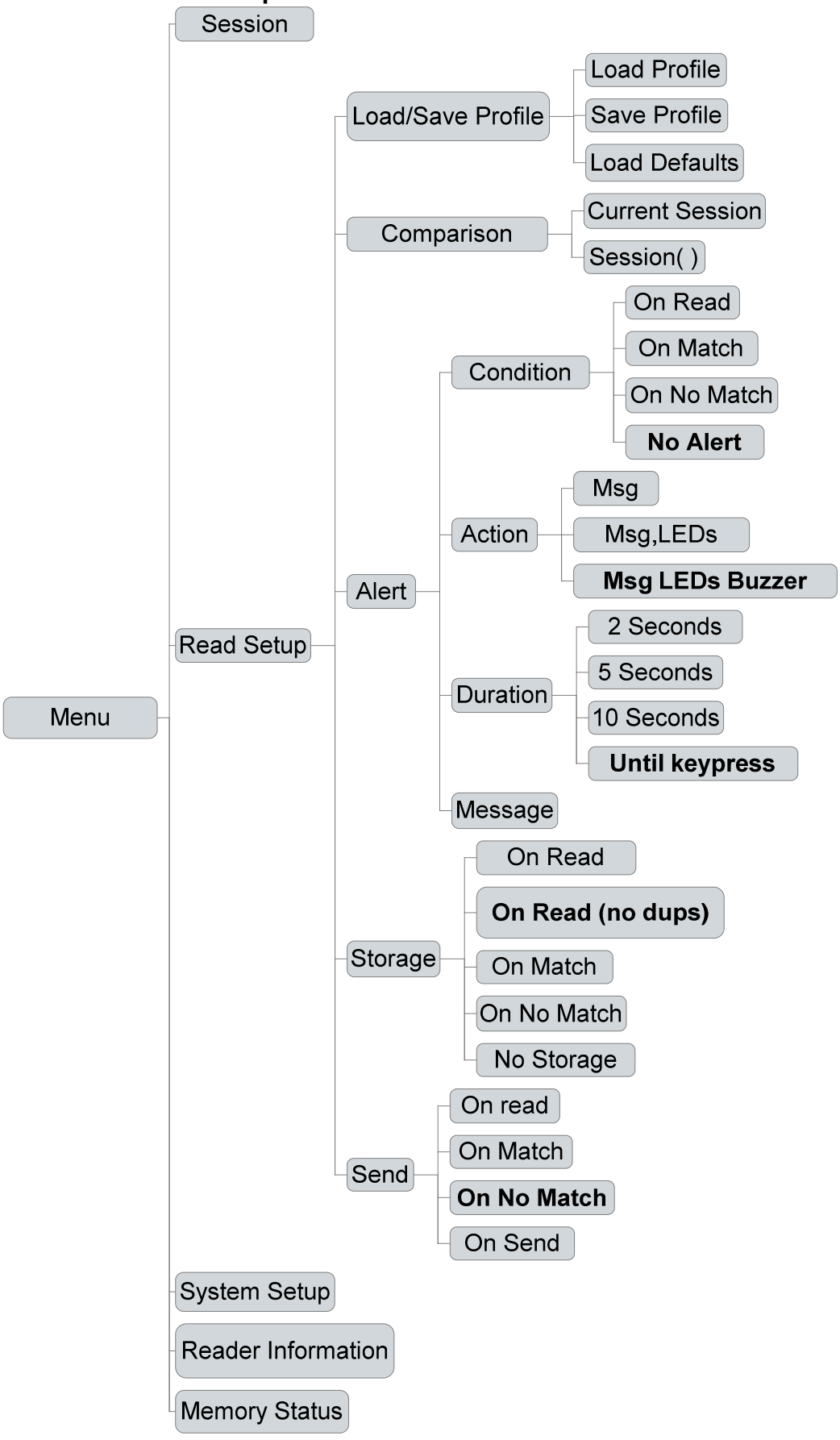
The readers menu has 5 main menu and several sub menu items

Session
Read Setup
System Setup
Reader Information
Memory Status

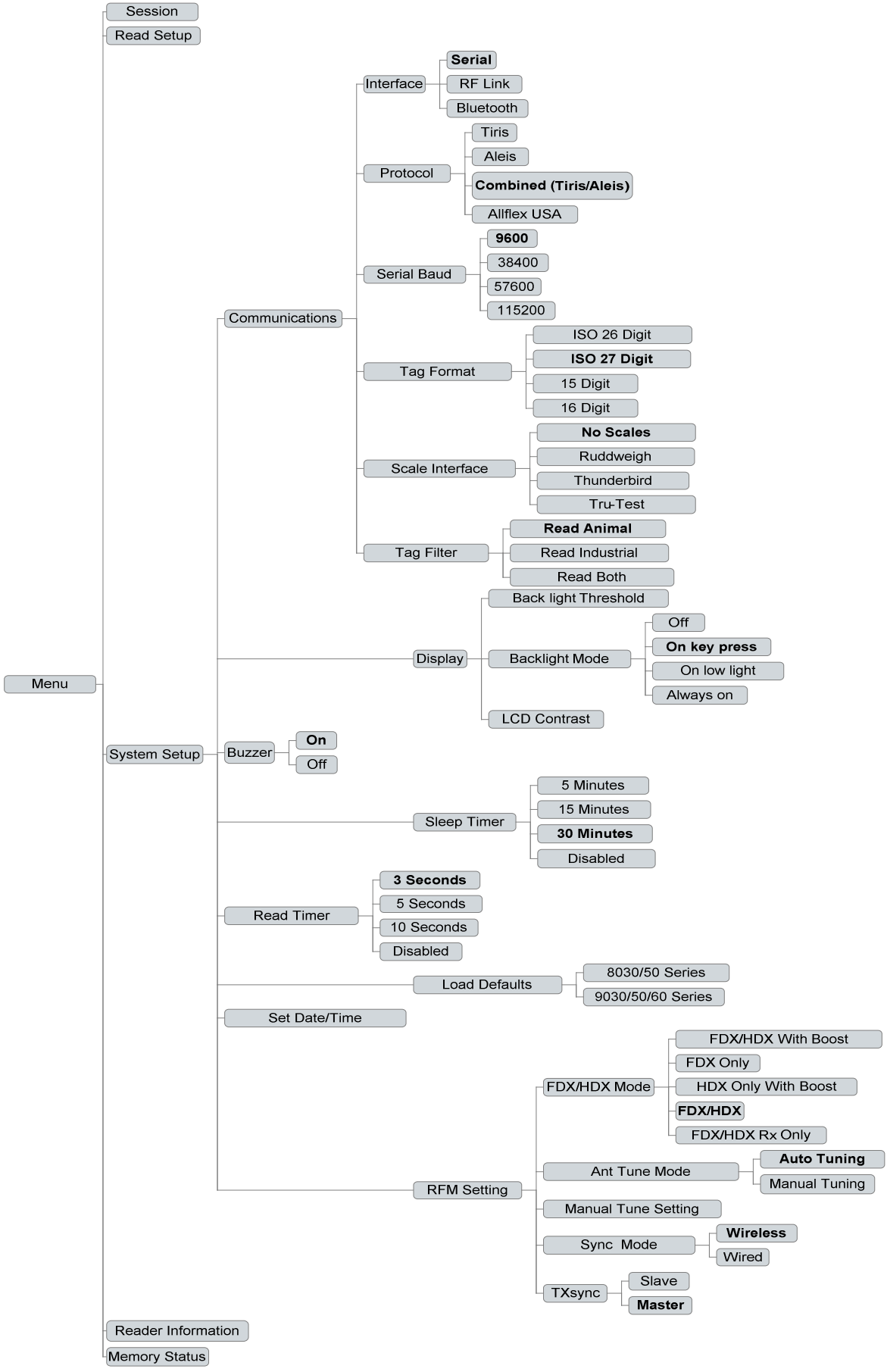
15.1 Session Menu



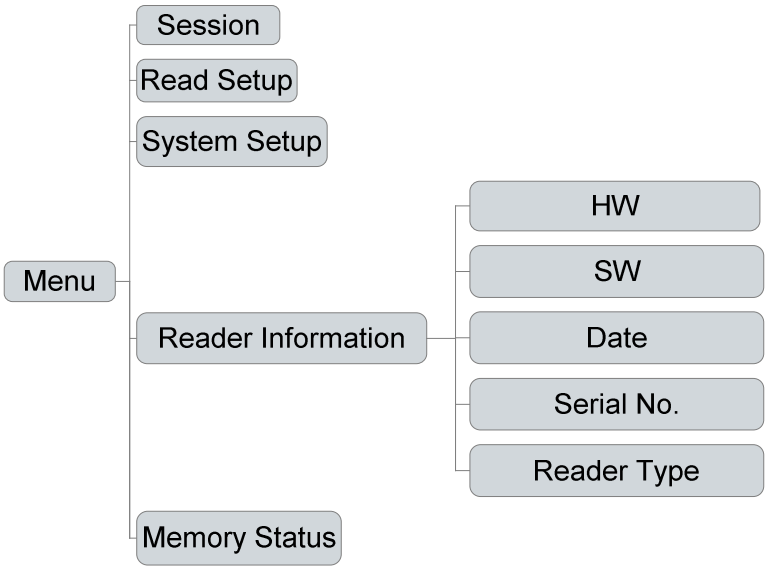
15.2 Read Setup Menu



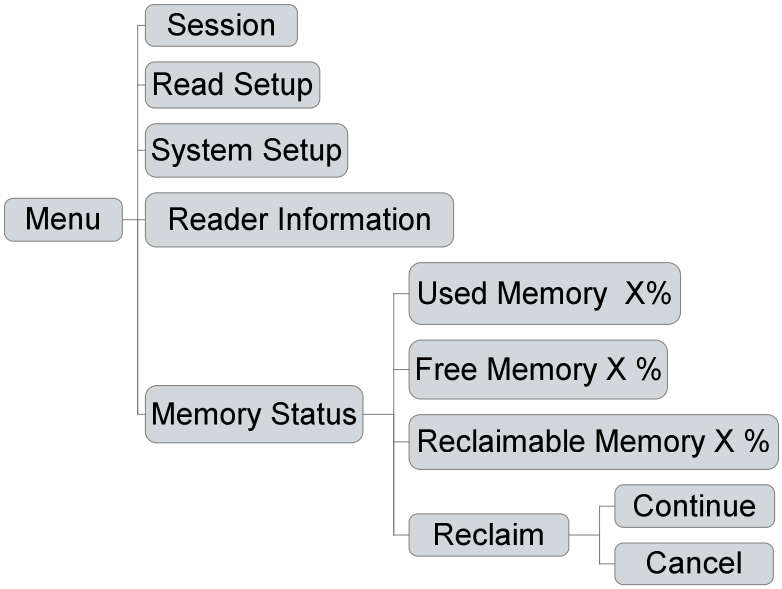
15.3 System Setup Menu



15.4 Reader Information Menu



15.5 Memory Status Menu



16.0 ISO-FFNB9060 AUDIO AND VISUAL ALERTS

Features	Buzzer	LCD Display	LEDs at Top of LCD	6 Auxiliary LEDs – 3 each side of the screen
Valid READ	One beep	Current RFID number, eg. 971 000000002861, at top of screen	READ LED blinks once	
Valid READ & ID STORED	Two beeps	Current RFID number, eg. 971 000000002861, at top of screen, and counter at bottom right of screen will increase.	READ and STORED LEDs blink once	
No ID Read	One long beep (after read on time out)	NO RFID READ		
No RF Signal being received.	Two very quick beeps (every 30 seconds)	(Flashing)		
Battery Charge at Low Level	Three very quick beeps (every 60 seconds)			
Battery Charge at Critically Low Level	Constant Beeping	BATTERY LOW		Flashes as unit is about to turn off.

Legend for LCD Visual Displays.

Battery Level Indicator

- Fully Charged
- Half Charged
- No Charge—unit will turn off

BlueTooth

BT **(Solid)** Connected

BT **(Flashing)** Not Fitted or BT Not ready

RF Signal Indicator

Connected

(Flashing) No Connection

17.0 ISO-FFNB9060 MENU

17.1 Session

17.11 New

Starts a New Session

17.12 Data Entry Setup

- Sets up Data Entry Fields

17.13 Data Entry Locking

- Sets up Data Entry Locking Fields

17.14 Templates

Session Template

- Save Template
- Default Template

17.15 Send to PC

Sends the RFIDs in the memory to the PC

There are two options:

- Current Session
- All Sessions

17.16 Clear

Clears the readers memory. There are two options:

- Current Session
- All Sessions

17.17 Change Name

- Changes Sessions Name

17.18 Select

- Selects the session on the reader . Any RFIDs read will be stored in the session selected

5.2 Read Setup

17.21 Load/Save Profile

Load defaults – (Resets Read Setup to factory defaults)

17.22 Comparison

Compares RFIDs read with

- Current Session
- Session (Select which session number you want to compare RFID's with)

17.23 Alert

Alert Options

The Condition Sets the alert condition when a RFID is read.

There are 4 Alert Conditions :

- On Read
- On Match
- On No Match
- No alert

Action

Sets the Alert Action There are 3 options:

- Msg = Message on screen
- Msg,LED's = Message & Lights
- Msg, LED's, Buzzer = Message, Lights & Buzzer

Duration

Sets the Alert Duration. There are 4 options

- 2 Seconds
- 5 Seconds
- 10 Seconds
- Until Keypress

Message – Sets up Message

17.24 Storage

Sets the store Condition when a RFID is read There are 5 options

- On Read
- On Read (No Duplicates)
- On Match
- On No-Match
- No Alert

17.25 Send

Sets the Send Condition when a RFID is read. There are 4 options

- On Read
- On Match
- On No-Match
- No Send

17.3 System Setup

17.31 Communications

Interface

Sets the interface the RFID is send out when a tag is read

- Serial
- RF Modem
- Bluetooth

Protocol

Sets the protocol string when a RFID is read or when communicating with the reader

- Tiris
- Aleis
- Combined (Tiris/Aleis)
- Allflex USA

Serial

Sets the Baud Rate for the serial output only

- 9600
- 38400
- 57600
- 115200

Tag Format

Set the lentgh of the RFID string

- ISO 26 Digit
- ISO 27 Digit
- 15 Digit
- 16 Digit

Scale Interface

Sets scale type, overrides Tag Output Format, Serial Baud Rate, and Download Format to suit the scale's requirements.

- No Scales
- Ruddweigh
- Thunderbird
- Tru-Test

17.32 Display

Backlight Threshold

(Select required lighting Eg 1 = always bright. 16 = will come on when very dark. Subject to Backlight Mode selection below)

Backlight Mode

Sets the condition when the Backlight comes on.

- Off
- On key-press
- On low-light
- Always On

LCD Contrast

(Select required contrast Eg 90 = light contrast. 120= very dark. Subject to viewing angle)

17.33 Buzzer

Turns the Buzzer On/Off

- Off
- On

17.34 Sleep Timer

Sets the Sleep Timer. The unit will turn off to save battery power if it is not used in the selected time

- 5 Minutes
- 15 Minutes
- 30 Minutes
- Disabled

17.35 Read Timer

Sets the read timer for handheld mode

- 3 Seconds
- 5 Seconds
- 10 Seconds
- Continuous

17.36 Load Defaults

Loads the defaults back to factory settings

- 8030/50 Series
- 9030/50/60 Series

17.37 Set Date/Time

-Sets Date and Time

17.38 RFM Settings

FDX/HDX Mode

Sets the readers FDX/HDX mode

- FDX/HDX With Boost
- FDX Only
- HDX Only With Boost
- FDX/HDX
- FDX/HDX Rx Only

Ant Tune Mode

Selects Auto or manual antenna tuing.

- Auto Tuning
- Maunual Tuning

Manual Tune Settings

When Manual tune is selected above you can change the tuning value to suit the read requirement, either for a maximum voltage (maximum range) or detune for a smaller read distance.

Sync Mode

Sets read cycle synchronization mode. Wired requires the TXS (orange) signal wires to be connected to the unit if TX sync is a slave.

- Wireless
- Wired

TxSync

Sets TX sync mode to master or slave unit (only applicable to Wired Sync Mode).

- Slave
- Master

17.4 Reader Information

(This is for technical assistance only & product identification)

Reader Info
Hardware: (Hardware Version)
Software: (Software Version)
Date: (Software Date)
Serial No: (Reader Serial Number)
Reader Type: (Aleis Reader Model)

17.5 Memory Status

Used Memory X%	Percentage of Used Memory
Free Memory X%	Percentage of Free Memory
Reclaimable Memory X%	Percentage of Recoverable Cleared Memory (old Sessions)

18.0 ISO-FFNB SERIES READER SPECIFIACTIONS

General	
Frequency:	134.2Khz
RFID Compatibility:	ISO 11784 &11785 HDX and FDX-B
User Interface:	RS-232 Serial Port/Bluetooth Option.
RS-232 Port:	9600bps, 8 Data Bits, No Parity, 1 Stop Bit.
RFID Code output:	Decimal or Hex
Antenna Tuning:	Auto or Manual
User Options:	Via Keypad or RS-232 Serial
Battery Power:	12-14 Volt DC

Physical	
Wand Length:	Wand 300mm Standard other length options available
Cord Length:	1.2m and 3m fully stretched
Material:	Neck Bar Antenna- PVC, Wand -Fiberglass, Box- Polycarbonate
Operating Temperature:	-20c to +60c
Storage Temperature:	-40c to +85c
Humidity:	0 to 100%
Hermeticity:	IP66

Performance	
HDX:	Wand = >500mm using Allflex HDX/HP tag in best orientation.
FDX:	Wand = >400mm using Allflex FDX-B/HP tag in best orientation.
Read Rate:	Wired Sync mode 10 times/second, Wireless Sync mode 9 times/second.
Read Error Rate:	less than 1 in 1 million.

19.0 ALEIS CONDITIONS OF SALE

In these conditions:

`Vendor' means Aleis Pty Ltd ACN 081 411 734 of Cnr Old Rosevale & Jandowae/Kingaroy Roads, Jandowae, Queensland, 4410 which is the seller of the goods

'Factory' means the Vendor's principal place of business at Cnr Old Rosevale & Jandowae/Kingaroy Roads, Jandowae, Queensland,4410.

Purchaser' means the customer(s) described overleaf which is the purchaser of the goods.

`Goods' means the products and, if any, services specified overleaf

Nothing in these conditions shall be read or applied so as to exclude, restrict or modify or have the effect of excluding, restricting or modifying any condition, warranty, guarantee, right or remedy implied by law (including the Trade Practices Act 1974) and which by law cannot be excluded, restricted or modified.

Words denoting the singular number only include the plural number and vice versa; where reference to any gender includes every other gender and words denoting individuals include corporations

These conditions (which shall only be waived in writing signed by the vendor) shall prevail over all conditions of the purchaser's order to the extent of any inconsistency.

3. The goods and all other products sold by vendor are sold on these terms and conditions.

4. Unless previously withdrawn, vendor's quotation is open for acceptance within the period stated therein or, when no period is so stated, within thirty (30) days only after its date. The vendor reserves the right to refuse any order based on this quotation within 7 days after the receipt of the order.

5. The cost of any special packing and packing materials used in relation to the goods shall be at the purchaser's expense notwithstanding that such cost may have been omitted from any quotation.

6. The purchaser waives any claim for shortage or discrepancy of any goods delivered if a claim in respect thereof has not been lodged with vendor within seven (7) days from the date of receipt of goods by the purchaser.

7. All specifications, drawings, and particulars of weights and dimensions submitted by vendor are approximate only and any deviation shall not be taken to vitiate any contract with vendor or form grounds for any claim against vendor. The descriptions, illustrations and performances contained in catalogues, price lists and other advertising matter do not form part of the contract of sale of the goods. Where specifications, drawings or other particulars are supplied by purchaser, vendor's price is made on estimates of quantities required. Should there be any adjustments in quantities above or below the quantities estimated by vendor and set out in a quotation, then any such increase or decrease shall be adjusted on a unit rate basis according to unit prices set out herein.

8.1 Any performance figures given by vendor are estimates only. Vendor shall be under no liability for damages for failure to attain such figures unless specifically guaranteed in writing and any such written guarantee shall be subject to the recognised tolerances applicable to such figures.

8.2 The Purchaser acknowledges that frequency from other products, for example computer equipment, videos, loud speakers and other metal products may affect the goods' performance. The Vendor gives no warranty that in the event of any frequency disruption the goods will remain fit for the purpose intended. The Vendor will not be liable for any claims made as a result of other equipment or other things interfering with the performance of the goods whether on account of frequency disruption or otherwise.

9. Delivery dates mentioned are an estimate only and vendor shall not be liable for late delivery or non-delivery and under no circumstances shall the vendor be liable for any loss, damage or delay occasioned to the purchaser arising from late or non-delivery or late installation of the goods.

10. (1) Unless specifically agreed otherwise in writing, delivery shall be ex-factory. The Purchaser must make its own arrangements for the transport of the goods from the factory and any assistance that the Vendor gives in transporting the goods shall not effect the rights of the Vendor under this Clause. Vendor is not responsible for any loss or damage to goods in transit.

(2) Risk in the goods shall pass to the Purchaser upon dispatch of goods from Factory.

11. (1) Vendor's liability for goods manufactured by it is limited to making good any defects by repairing the same or at vendor's option by replacement, within a period not exceeding twelve calendar months after the goods have been dispatched (or installed by Aleis) provided that:

(a) defects have arisen solely from faulty materials or workmanship;

(b) the goods have not received maltreatment, inattention or interference;

(c) accessories of any kind used by the purchaser are manufactured by or approved by vendor;

(d) the seals of any kind on the goods remain unbroken; and

the defective parts are promptly returned free of cost to vendor.

all freight is paid by the purchaser.

(2) If goods are not manufactured by vendor the guarantee of the manufacturer thereof shall be accepted by the purchaser and is the only guarantee given to purchaser in respect of the goods.

(3) Vendor shall not be liable for and purchaser releases vendor from any claims in respect of faulty or defective design of any goods supplied unless such design has been wholly prepared by vendor and the responsibility for any claim has been specifically accepted by vendor in writing and in any event vendor's liability hereunder shall be strictly limited to the replacement of defective parts in accordance with para 11(1) of these conditions.

Except as provided herein, all express and implied warranties, guarantees and conditions under statute or general law as to merchantability, description, quality, suitability or fitness of the goods for any purpose or as to design, assembly, installation, materials or workmanship or otherwise are hereby expressly excluded and vendor shall not be liable for physical or financial injury, loss or damage or for consequential loss or damage of any kind arising out of the supply, layout, assembly, installation or operation of the goods or arising out of vendor's negligence or in any way whatsoever.

12. Vendor's liability for a breach of a condition or warranty implied by Div 2 of Pt V of the Trade Practices Act 1974 (other than s 69) is hereby limited to:

(1) in the case of goods, any one or more of the following:

the replacement of the goods or the supply of equivalent goods;

(b) the repair of the goods;

(c) the payment of the cost of replacing the goods or of acquiring equivalent goods;

(d) the payment of the cost of having the goods repaired; or

(2) in the case of services:

(a) the supplying of the services again; or

(b) the payment of the cost of having the services supplied again.

13. Vendor's liability under s 74H of the Trade Practices Act 1975 is expressly limited to a liability to pay to the purchaser an amount equal to:

(1) the cost of replacing the goods;

(2) the cost of obtaining equivalent goods; or

(3) the cost of having the goods repaired, whichever is the lowest amount.

14. Unless otherwise stated all prices quoted by vendor are net, exclusive of tax. Prices quoted are those ruling at the date of issue of quotation and are based on rates of freight, insurance, customs duties, exchange, shipping expenses, sorting and stacking charges, cartage, rate of weighs, cost of materials and other charges affecting the cost of production ruling on the date the quotation is made and any alterations thereto either before acceptance of or during the currency of the contract shall be to the purchaser's account.

15 The purchase price in relation to goods shall be payable and payment or balance thereof shall be made immediately at time of order, or otherwise as agreed in writing.

16. Vendor reserves the following rights in relation to the goods until all accounts owed by the purchaser to vendor are fully paid:

(1) legal ownership of the goods;

(2) to enter the purchaser's premises (or the premises of any associated company or agent where the goods are located) without liability for trespass or any resulting damage and retake possession of the goods; and

(3) to keep or resell any goods repossessed pursuant to (2) above;

If the goods are resold, or products manufactured using the goods are sold, by the purchaser, the purchaser shall hold such part of the proceeds of any such sale as represents the invoice price of the goods sold or used in the manufacture of the goods sold in a separate identifiable account as the beneficial property of vendor and shall pay such amount to vendor upon request. Notwithstanding the provisions above vendor shall be entitled to maintain an action against the purchaser for the purchase price and the risk of the goods shall pass to the purchaser upon delivery.

17. Any property of the purchaser under vendor's custody or control shall be entirely at the purchaser's risk as regards loss or damage caused to the property or by it.

18. Vendor reserves the right to make a reasonable charge for storage if the purchaser does not take delivery of goods within fourteen days of notification that the goods are ready for collection.

19. Vendor shall not be under any obligation to accept goods returned by the purchaser and will do so only on terms to be agreed in writing in each individual case.

20. All goods to be supplied by vendor shall be as described on the quotation overleaf and the description on such order modified as so agreed shall prevail over all other descriptions including any purchaser's specification or inquiry.

21. No order may be cancelled except with consent in writing and on terms which will indemnify vendors against all losses.

22. The contract for sale of the goods is made in the state of Queensland and the parties agree to submit all disputes arising between them to the courts of such state at any court competent to hear appeals therefrom.

23. The Purchaser shall pay all and any import duties, levies or imports and/or any sales, use, excise, gross receipts, value added, goods and services tax, property or other taxes or duties of any kind whatsoever assessed upon or relating in any way to the goods ordered by the Purchaser irrespective of the person, nation, state or authority requiring payment thereof.

24. If the Vendor has not paid for any goods on the due date specified in this Agreement, without prejudice to any other right or remedy, all outstanding money shall bear interest on daily balances until paid at the rate of 1.5% per month and such money together with all interest shall be recoverable forthwith from the Purchaser.

The Purchaser charges as a fixed charge with the payment of all monies now or in the future becoming owing hereunder all his property both real and personal (other than property referred to in *Section 262 (i) of the Corporations Law*) and as a separate charge charges all his other property with the payment of all monies now or in the future becoming owing hereunder, provided that this second charge will be a floating charge in respect of the Purchaser's current assets but otherwise will be a fixed charge. The Purchaser irrevocably makes, nominates, constitutes and appoints, and in the place and stead of the Purchaser puts and deputes the Vendor and (if the Vendor is a corporation) the directors, general manager and secretary for the time being of the Vendor jointing and each of them severally to be the Attorney or Attorneys of Purchaser at any time after default as aforesaid has been made (sufficient proof of which will be the Statutory Declaration of the Attorney or Attorneys or either or any of them) to do all such things as may be required to consent to any Caveat or other like instrument under the Real Property Legislation of any other jurisdiction in the form prepared by the Vendor's Solicitor over any or all of the Purchaser's property and to execute a mortgage and/or charge or other like instrument under the Real Property Legislation of any other jurisdiction in such form and containing such terms and conditions as the Vendor may require over any or all of the Purchaser's property and from time to time to appoint a substitute or substitutes and such appointment or appointments at pleasure to revoke and another or other substitute or substitutes to appoint and generally to do, execute and perform any act, deed, matter or thing for that purpose as fully and effectually as the Purchaser could do and the Purchaser agrees to ratify and confirm all and whatever the said Attorney or Attorneys or any substitute or substitutes lawfully do or cause to be done for that purpose. The End Ver10/05/01