

**Operators Manual** 

# X15 Console A1749 1.3





#### How to use this operator's manual

As with any computer operated equipment, software and/or hardware is in many cases changed and upgraded over the life of the equipment. KEE Technologies software engineers are constantly working on software enhancements which will provide you with many additional benefits and features in the future.

The ZYNX System will keep on evolving! ...to ultimately improve your 'bottom line"!

KEE Technologies personnel have records of all changes implemented to your system with the subsequent serial number.

## To keep this Operator's manual "alive" and current with your equipment and software versions you will need to administer and document the evolution of your ZYNX System in this manual.

In some cases we will provide you with software upgrades and additional/ replacement pages to add to this manual. With major software upgrades we may provide you with a completely new manual for the corresponding ZYNX Solution.

When talking to KEE Support staff, always have this manual with you.

In the C:\Lynx directory, on the ZYNX console directory there is a text file similar to "version 3.19.txt" (the number may change) this file can be accessed by "double clicking" the file name and the file will open up in "Notepad". This will display all the software and the version numbers loaded onto the Zynx console at the KEE factory and is updated if the Zynx console is sent back for repair. The support staff may request the operator to access the file.

Below is space provided to keep records of any software and hardware upgrades you may have received.





В



Type of upgrade (software or hardware)	Version	Date	Manual upgraded


#### **ZYNX** Features

ZYNX has a number of Ports on the back available for connection to different equipment.



A	4 x Serial Ports
B	2 x USB Ports
G	Power Connection
D	PS2 Port
9	ON /OFF Switch (NEW Spring Return Type Switch)
Ø	External VGA adapter
G	Speaker
0	LAN Port
•	Speaker Connection
0	Canbus

#### **ZYNX Features (Ports continued)**

#### 4 x Serial Ports

These are used for connecting to a DGPS and other KEE Product Interfaces. DGPS should be connected to COM1.

#### 2 x USB Ports - Memory Backup/Data Transfer

One USB port (USB 2) for normal connection and one USB port (USB 1) displaced inside ZYNX to allow a close fit for the USB Thumbdrive. This allows data transfer to other PC's and allows software upgrades for the ZYNX console.

#### 1 x PS2 Ports

This is for connection to a Mouse and Keyboard (supplied). These may be plugged in at any time whilst ZYNX is running. A splitter cable will be required to use a PS2 mouse in conjunction with the keyboard.

#### **CANBUS Port**

This is a port for future connection to equipment in harsh environments. CANBUS is a communications protocol similar to RS232 and RS485 rapidly becoming a world standard in the automotive and agricultural industries. ZYNX is the first ruggedized PC offering this connection.

#### **External VGA adapter**

This allows connection to a large external screen in the machine or on the desktop at home.

#### LAN Port

100MHz, for external communication lines.

#### New Zynx Console Features

- Faster STARTUP and SHUTDOWN
- ATX power ON/OFF Switch needs to be held ON for short period to power up. Switch is spring return. When shutting down the console, the console automatically powers down and switches the console OFF.
- Processor speed 300Mhz.
- Faster performance when running multiple applications. (Improved VGA)
- The ZYNX Console logo acts as a 2 stage "Dimmer switch" for "Night Work"

#### Screen

The ZYNX console has a new feature, the ZYNX Logo which is positioned on the front of the ZYNX console, on the bottom left-hand side; now acts as a two stage dimmer switch:

Touch the ZYNX Logo once with your finger will dim the backlight of the screen for using the ZYNX console for "Night Work". Touch the ZYNX logo again will return the screen to normal brightness, for working in normal daytime conditions.

6.4" high contrast TFT, Backlit, 640x480 Resolution. This screen has a very high contrast allowing clear visibility outdoors.

The ZYNX console should be mounted in a position where minimal direct sunlight impinges on the screen, generally elevated in the cab and tilting down. The screen is pre set at maximum brightness

This screen has a touch panel fitted with a glass backing. This backing will break if impacted heavily. The touch panel is very durable and should be wiped clean regularly when ZYNX is switched off.

The calibration of the touch panel should never change, however if ZYNX has operated in extreme temperatures, this calibration may change. "See starting up the system".

#### Audio

ZYNX has a small speaker built in for Audible and Voice alarms. The operating volume of ZYNX is adjusted in the programs by selecting Options / Settings. Simply slide your finger to set the desirable level then close. Audio jack is supplied at the rear of the console for the fitment of an **OPTIONAL** external speaker

#### **Keyboard & Mouse**

These are supplied. The keyboard with a PS2 connection. Connections on the rear of ZYNX are labeled. A USB Mouse is supplied, which plugs into the port marked "USB 2" on the back of the ZYNX console.

#### Mounting of the ZYNX Console in cabin

Fit the supplied RAM mounting bracket securely to any metal base, preferably in your vision whilst the vehicle is moving.



#### Wiring connections



#### Power

9 - 18V DC with vehicle Power Cord, ZYNX should be connected directly to the battery or warranty will be void.

240V AC with Power Pack for desktop operations.

Cigarette Lighter connection is not recommended.

The ON/OFF switch for ZYNX is at the rear of the ZYNX console.

To turn ON the ZYNX console "push down" and hold the Power switch for 1 second.

**Do Not** start the engine whilst the ZYNX console is running. Start the engine; then "push down" and hold the ZYNX power switch for 1 second.

#### ZYNX will not start unless there is a minimum of, 13 DCV supplied. ie: vehicle must be running.

ZYNX console takes approximately 30 seconds to start. If ZYNX power is suddenly lost, data will not be lost as the data is backed up every 2 seconds.

ZYNX is equipped with an internal battery backup with auto shutdown to prevent loss of power if suddenly disconnected. This battery is continually receiving trickle charge whilst ZYNX is actually ON.

## NOTE: It is important that the ZYNX is started and shut down correctly, as damage to the electrical components may occur .

If power is suddenly lost to the ZYNX console, for more than 5 seconds the Auto Shutdown screen will appear on a 5 second shutdown. If power is not reconnected, within the 5 seconds then the ZYNX console will do an orderly shutdown and turn OFF the ZYNX console automatically. The ZYNX will not start again until the power is reconnected and the power switch is 'pushed down' and held for 1 second.

As with Windows 98, if total power is suddenly lost, during the next start up, Scan Disk may run delaying the start, this is normal. The ZYNX Power Management system should not allow this to happen under normal circumstances.

ZYNX can be supplied with an optional 240VAC Power Pack for desktop operation at home.

#### First time start up



**IMPORTANT:** During **EVERY** start up of the system the engine (alternator) must be running to ensure that the supply of at least 13.0 Volts is being delivered to the ZYNX console.



1. Make sure that Power is connected to the System

**Power Connection** 



• 2. Plug the USB mouse into the USB/2 port.

Plug the PS/2 keyboard into the KBD/MOUSE port.





The ZYNX console is now starting up the operating system.

You will notice the computer screen changing screens as shown here.



When this desktop screen appears **be ready for the next step**, where you will have to interrupt the system!

Calibrating the touch screen panel for your touch.



As soon as you see this screen **click on the "STOP" button** using your finger. Because this screen only appears for about 6 seconds you will have to press "STOP" within that time.

All touch screens have been calibrated before leaving the factory, however it is best practice to adjust the screen sensitivity to your personal touch.

#### Calibrating the touch screen panel for your touch. (continued)

1



Once the system has halted click on **"ALIGN**" button using your finger.

2

It is recommended that the USB mouse is available incase a 'bad calibration' is recorded. If a bad calibration is recorded then select the "STOP" and "ALIGN" buttons using the USB mouse, if unable to select buttons using your finger.

Carefully touch the **cross hairs** exactly in the centre of the two lines using the finger which you commonly use for operating the system.

З

4

30-05-05

x Product Selection

ZYNX

ZYNX

VRC

ZYNX

STOP

#### Calibrating the touch screen panel for your touch. (continued)



- 8 ×

ZYHX

BOOM

START

Once the screen cross-hairs have been touched 5 times, the screen automatically returns to the ZYNX Startup screens.

You can now disconnect the mouse and the ZYNX System should now be ready for operation using the touch screen. If you ever need to calibrate the touch screen in the future, simply repeat the foregoing steps at any time.

ZYHX   VRC   ZYHX   ZYHX   ZYHX   USE TYMY LINK	Zynx Product Selection		EXACT SEED PLACEMENT
CYNX SPEADER USE TWAY LINK STOP UPGRADE ALIGN START	ZYNX vrc	SEED RATE	EXTRX HEADER HEIGHTRATERAL CONTROL
	ZYNX	STREADER	BOOM
	USE TAX LINK	UPGRADE	START

ZYNX

SPRAY

ZYNX

SEED RATE

ZYNX

UPGRADE

ALIGN

### Selecting the controller mode (product selection).

Selection of the products is done at start up on the Startup screen, as shown. Select "STOP", to allow time, to make a selection change.

If there is no need to change selections then allow the Startup screen to proceed loading the programs selected.

Select the mode(s) you wish your ZYNX to control today. This can be done by simply touching the application icon(s). Currently "ZYNX Guidance" and "ZYNX Spray Controller" are selected.

The mode is applied as the icon is highlighted.



#### Returning to the Windows Desktop



0.0 km/hr DOG NO GPS

0.0 km/hr DOG NO GPS

To return from a ZYNX Solution (Guidance is shown here) simply touch the **"EXIT**" button.

Uncheck the "Shut down system" check box. No tick in the box.

Touch the "**OK**" button.

The ZYNX Software will then quit and the Windows98 desktop will appear.

To then shut down the computer simply press on the "START" button (located on the task bar) and choose "SHUT DOWN" from the menu.

#### Switching the ZYNX Console OFF



To return from a ZYNX Solution (Guidance is shown here) simply touch the **"EXIT**" button.

0.0 km/hr DVC NO GPS Are you sure you want to exit? DVC CANCELON CANCEL



SOLUTIONS

**CHECK (tick)** the "Shut down system" check box. By default it will be ticked.

Touch the **"OK"** button.

The ZYNX Software will then quit , several screens will appear until.

Then the ZYNX console will now power down automatically and switch the ZYNX console OFF.

#### **Toolbar Settings**



#### **Screen Settings**



#### Transferring data using USB Thumbdrives



#### USB ports

There are two USB ports installed on the ZYNX System. One for normal connection and one displaced inside ZYNX to allow a close fit for the USB Flash Drive.

This is for software upgrades for the ZYNX console and data transfer to other PCs.

USB Thumbdrives are very rugged and do not have multiple fine pins as with PCMCIA or Compact Flash Cards.

USB Thumbdrives are also HOT plugable which means they can be carefully plugged in and removed at any time whilst the ZYNX console is running. These Thumb Drives are available from KEE in a standard size of 128 MB.

(Please Note: Software supplied on the CD for the ThumbDrive must be loaded on any other PC before the ThumbDrive will operate on that PC.

If the PC is running Windows XP then there is no need to load drivers as Windows XP automatically detects and loads the USB Thumbdrive drivers.


## WARRANTY

The warranty provided by KEE Technologies Pty Ltd covers faulty manufacture, defective components and installation of components, but not installation to the machine.

For the warranty to be recognised by KEE Technologies Pty Ltd the end user of the equipment must in the first instance of a problem developing, contact the local Dealer from where the unit was purchased.

The Control Unit Micro Processor is covered for 12 months under this warranty.

Accessories such as cables, sensors and hydraulic kits are covered for 1 year under this warranty.

This warranty will become void if any attempt is made to repair or modify the Control Unit Micro Processor.

This warranty will become void for all components if they are misused, accidentally damaged, if any attempt is made to repair or modify them or operate them on other the recommended or specified voltage.

This warranty is in addition to and not in substitution for any warranty or condition implied by the provisions of the Trade Practices Act.

## **OPERATION OF WARRANTY**

In the event of warranty claim being made KEE Technologies Pty Ltd, will endeavour via its authorised dealer/installer to rectify the problem at the earliest opportunity. KEE Technologies Pty Ltd will arrange for the problem to be fixed and if necessary supply an exchange unit and or components. The method of repair shall be determined by KEE Technologies Pty Ltd at its sole discretion.

Any warranty claim shall at the first instance be reported to KEE Technologies Pty Ltd.

KEE Technologies Pty Ltd shall not in any event be liable for any direct or consequential injury, loss or damage arising out of any matter giving rise to a warranty claim.

Warranty registration must be filled in and Posted to KEE within 7 days of fitment to avoid warranty confusion at a later date if the unit fails during the warranty period





## AUSTRALIA

HEAD OFFICE 14 Park Way Mawson Lakes South Australia 5095

Office: +61 8 8203 3300 Fax: +61 1300 307 205

## USA

27071 Mueller Place Suite #3 Sioux Falls South Dakota 57108

Office: 605-368-2330 Fax: 605-368-2335

## **South Africa**

PO Box 7144 Flamwood 2572 Republic of South Africa

Office: +27 83 233 5497 Fax: +27 18 468 2822

## AUSTRALIA

Western Australia 16 Runyon Road Midvale, Perth Western Australia 6056

Office: +61 8 9250 5522 Fax: +61 8 9250 7820

### CANADA

#7, 7491 49th Avenue Red Deer Alberta T4P 1N1

Office: 403 340 1118 Fax: 403 340 1119

# www.keetechnologies.com

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