



Remote Display 3

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05/01/2016

Thank you for your purchase of our NEW Remote Display 3 scale monitor. The NEW **color** touch screen display and latest Windows technology allows us to provide you with LIVE scale data via our built in Weigh Shark scale Ethernet feature. Combine several Weigh Shark scales into a simple network via cable or wireless and monitor your plant operation. Include your plant PC in the network and monitor our scales LIVE in your office. If your PC has internet access, you can monitor your plant via the World Wide Web.

Use our Data Logging features to create graphs, charts and reports. You can store data on the Thumb Drive in the RD3 or down load the files directly from your PC.

It is our goal to assist you in giving you important plant production information via our Weigh Shark belt scales to make your plant as productive and profitable as possible.

Sincerely,

Mark Humphreys

President

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***NOTE: When you turn ON the Remote Display it typically takes about
20 seconds to boot up.***

Last Page: Create an AGGLINK Account



3.0 Installation

This section covers the basic steps of installation. Installation should be performed by qualified personal.

3.1. Mechanical Installation.

The Weigh Shark Remote Display should be in almost any location that is readily accessible to plant personal and is within reach of power and network connections. If the Remote Display is going to be mount outdoors it should protected from heavy machinery, falling debris and ice build up. The enclosure is rated NEMA 4x and IP68 which means it is designed to protect against penetration of dust and immersion in water.

The Remote Display enclosure has mounting feet integrated into the enclosure allowing easy installation.

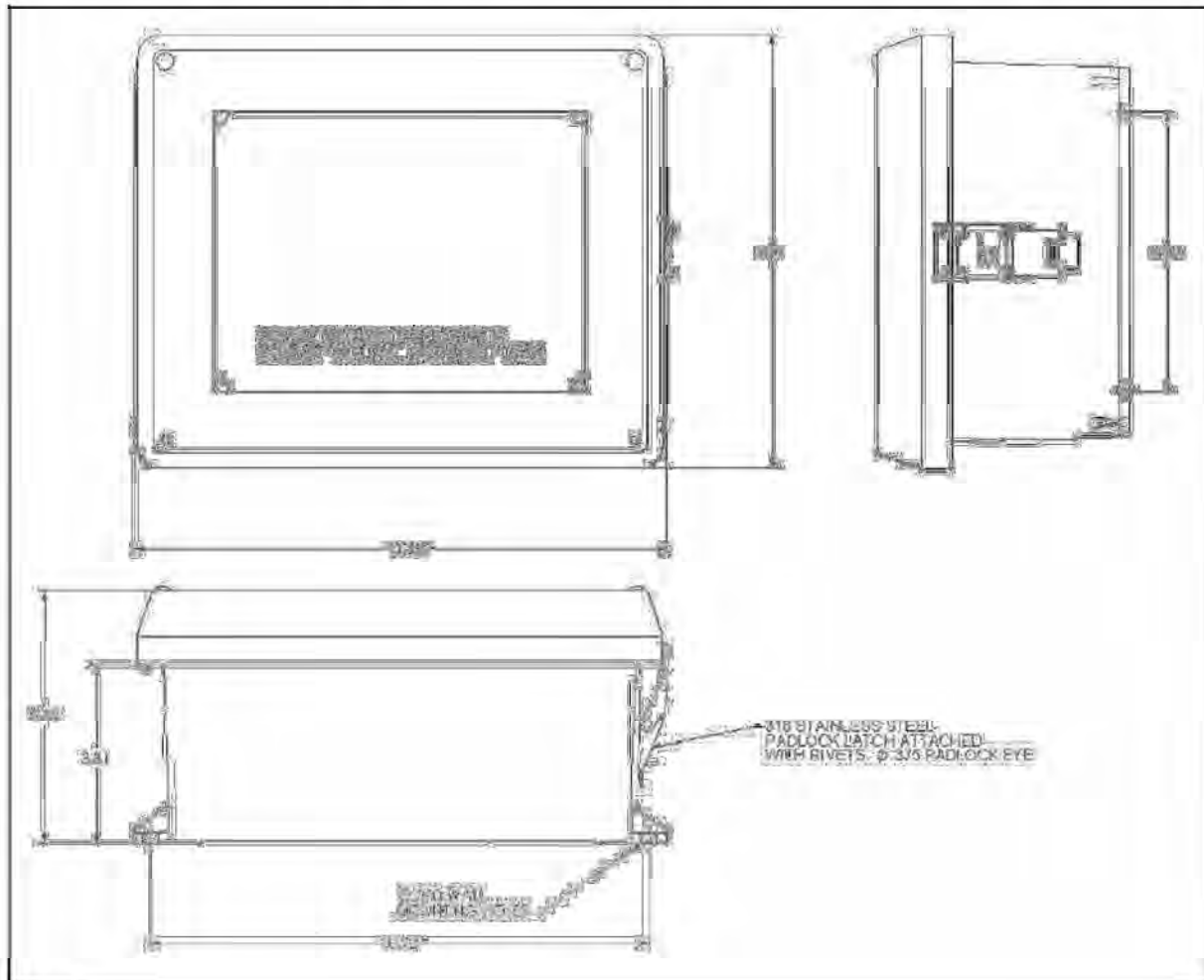
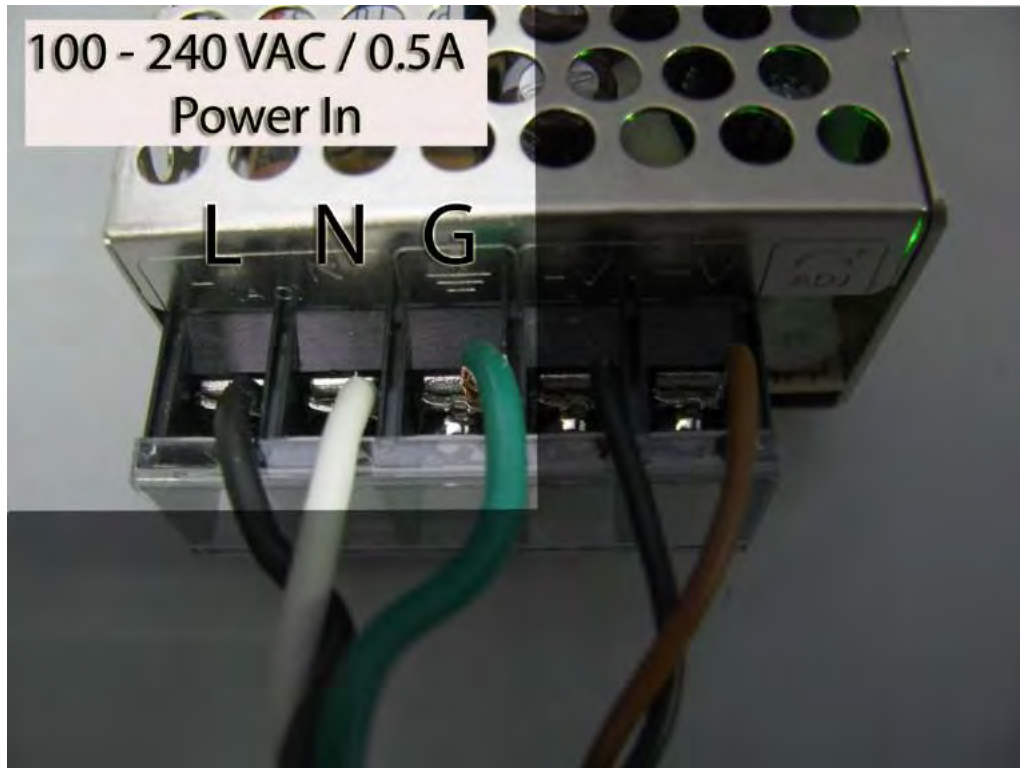


Figure 3

Wiring of 120 VAC to Power Supply

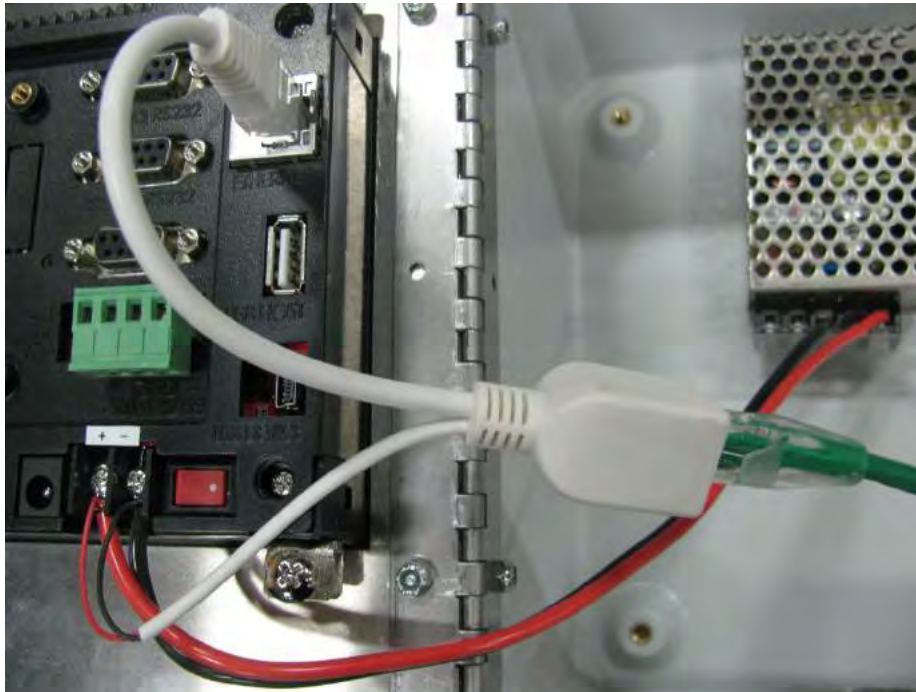


Wiring from Power Supply to RD 3 Touchscreen



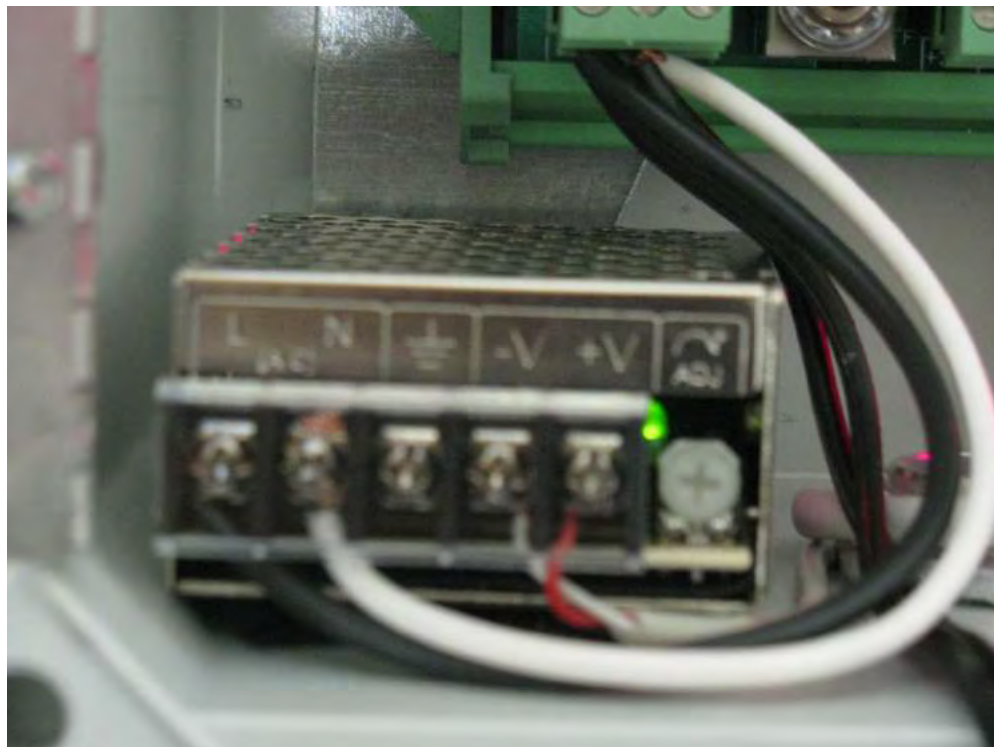
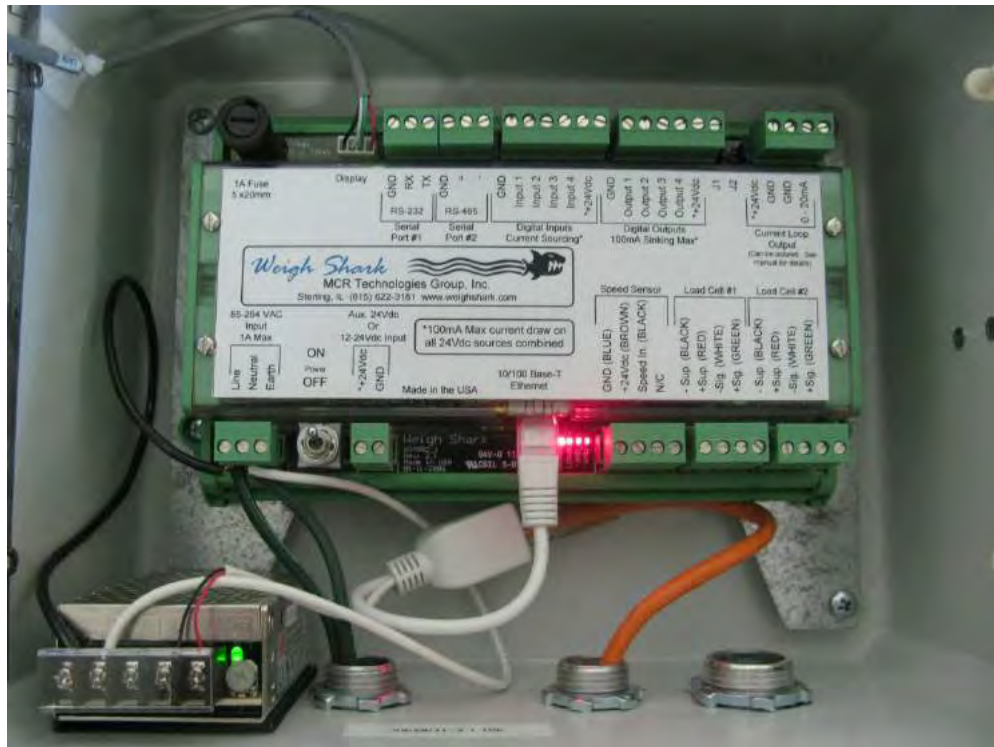
Power Over Ethernet

Radio Wiring RD 3



Power Over Ethernet

Radio Wiring - INTEGRATOR

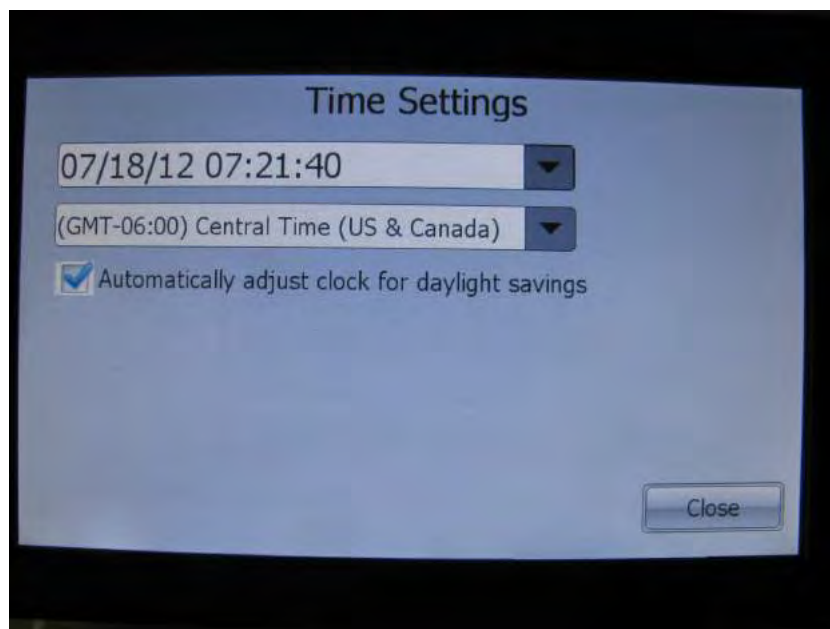


Menu



Select the Menu button to be able Name a scale, select the order you wish to view your scales, set up your IP Address Network, set the Time Zone, Clear your Totals, Back Up your scale data to a Thumb Drive, Check your Network Status, and more.

Date / Time Setup



Here you select your Time Zone and verify the Time and Date information.

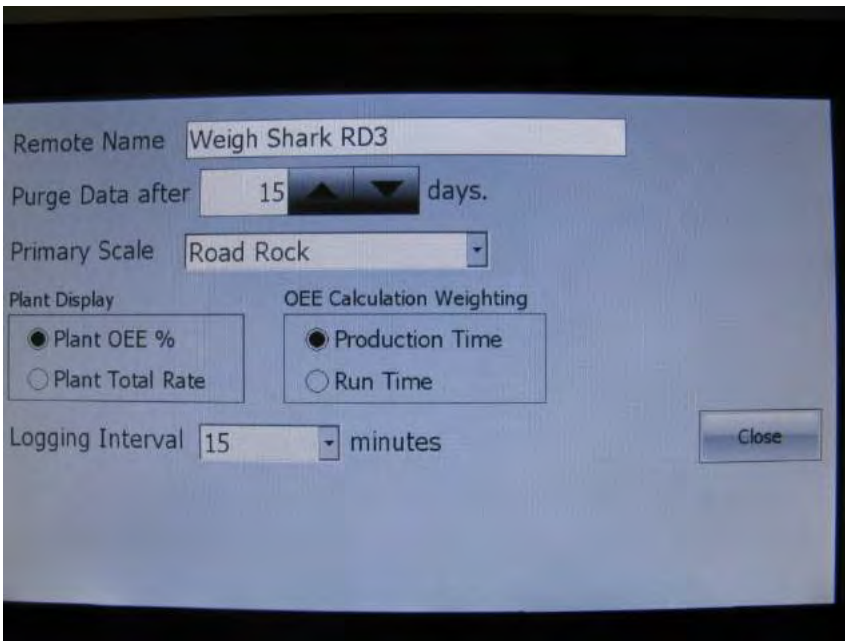
Scale Setup

The image shows a 'Scale Setup' screen with the following fields and controls:

- Scale Name:** A dropdown menu currently showing 'Chips'.
- Scale IP Address:** 192.168.1.51
- Scale ID:** 3232235827
- Display Order:** A numeric input field with '1' and up/down arrow buttons.
- View Time:** A numeric input field with '5' and up/down arrow buttons.
- Standard Rate:** A numeric input field with '250'.
- Scale Name:** A text input field containing 'Chips'.
- Use In Plant Calculations:** An unchecked checkbox.
- Allow Clear:** A checked checkbox.
- Show on Display:** A checked checkbox.
- Navigation:** 'Previous' and 'Next' buttons with circular arrows.
- Remove Scale:** A blue button with a white 'X'.
- Close:** A green button with the text 'Close'.

Use this screen to:

- 1. Select the order you wish to view each scale***
- 2. Select how many seconds you wish to view the individual scale in the Single View Mode***
- 3. Enter in your Standard Rate which will determine your Scale Efficiency calculations in percentages***
- 4. Name the Scale (IE. Chips)***



Plant Setup

***WE RECOMMEND
SETTINGS AS SHOWN***

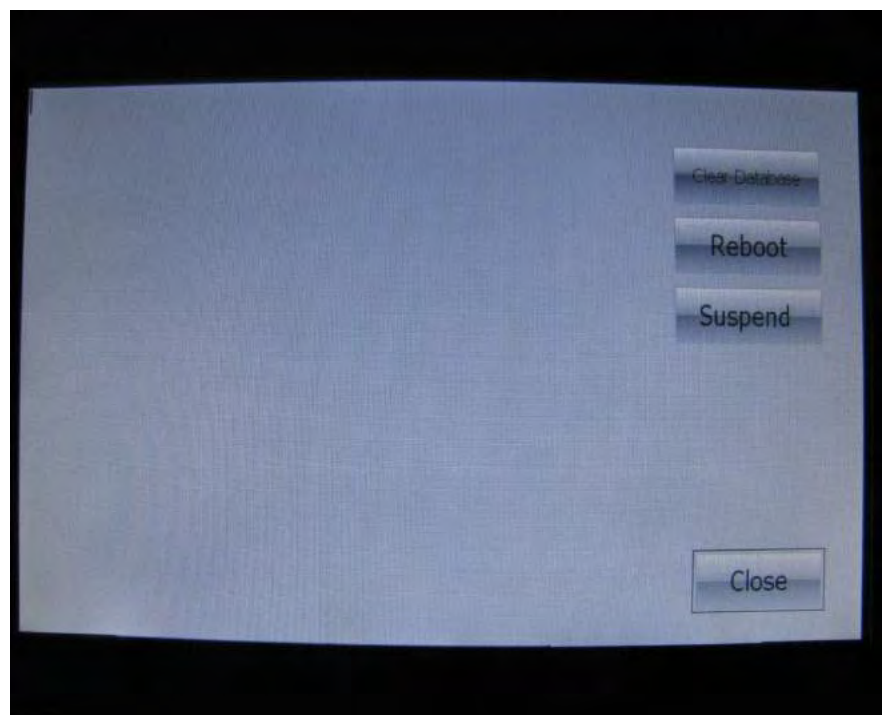
From this Screen you can Select:

- 1. How long you want Scale Data Stored.***
- 2. The way your Plant Production is Displayed***
- 3. How you want your Production Calculated***
- 4. Logging intervals***

Misc. Settings

From this screen you can:

- 1. Clear your Data
Base records***
- 2. Reboot the
Remote Display 3***



View Mode Overview

Our Remote Display 3 allows you to monitor your Weigh Shark belt scales in either Single View or Multi-View mode. You can select the view that best suits your needs.



The Multi-View mode screen displays a table of scale data:

Scale Name	Total	Rate	Speed	Eff %
Chips	6.8	241.6	248.8	97%
Lime	4.1	149.2	136.9	93%
Road Rock	8.1	301.3	221.4	86%
Clay	7.8	298.2	360.0	85%
Sand	1.9	64.1	242.0	80%

Navigation buttons: Single View, Multi-View, Menu

Multi-View

Multi-View allows you to view all the scales on your plant network at the same time as the title implies.

While viewing this screen you can select an individual scale to see more details.

Plant Efficiency: **87%** 7:23:30
07/18/2012

Scale Name	Total	Rate	Speed	Eff %
Chips	6.8	241.6	248.8	97%
Lime	4.1	149.2	136.9	93%
Road Rock	8.1	301.3	221.4	86%
Clay	7.8	298.2	360.0	85%
Sand	1.9	64.1	242.0	80%

[Single View](#)
[Multi-View](#)
[Menu](#)

Single View

The screenshot displays the 'Plant Efficiency' software interface. At the top, it shows 'Plant Efficiency' and '99.0%'. The date and time are '7:24:59' and '7/18/2012'. Below this, the 'Total View' tab is selected, and the 'Lime-Daily Total' report is displayed. The report compares 'Current' and 'Previous' data for various lime-related metrics. The 'Current' column is highlighted in blue. The 'Previous' column is highlighted in green. The 'Change' column shows the percentage difference. The 'Clear' and 'Close' buttons are visible at the bottom right of the report area. The 'Single View', 'Multi-View', and 'Menu' buttons are at the bottom of the screen.

	Current	Previous	%
Total	7.79	2634.42	
lime (tons)	.052	17.590	1%
lime (kg)	149.9	149.0	
lime (lb)	0	0	3%
lime (oz)	.052	17.595	
lime (g)	0	0	7%
lime (mg)	.052	17.5902	
lime (micro)	0	0	0%
lime (nano)	100%	100%	
lime (pico)	94%	94%	
lime (femto)	94%	94%	
lime (atto)	6.1	2613.6	
lime (zepto)			

7:21:50 AM 7/18/2012

Clear

Close

Single View Multi-View Menu

Single View mode allows you to view individual scale details for each scale on the network. You can turn on the Scroll feature and the screen will scroll each screen for the desired seconds you program. You can stop the scroll process to view one specific scale for as long as you desire.

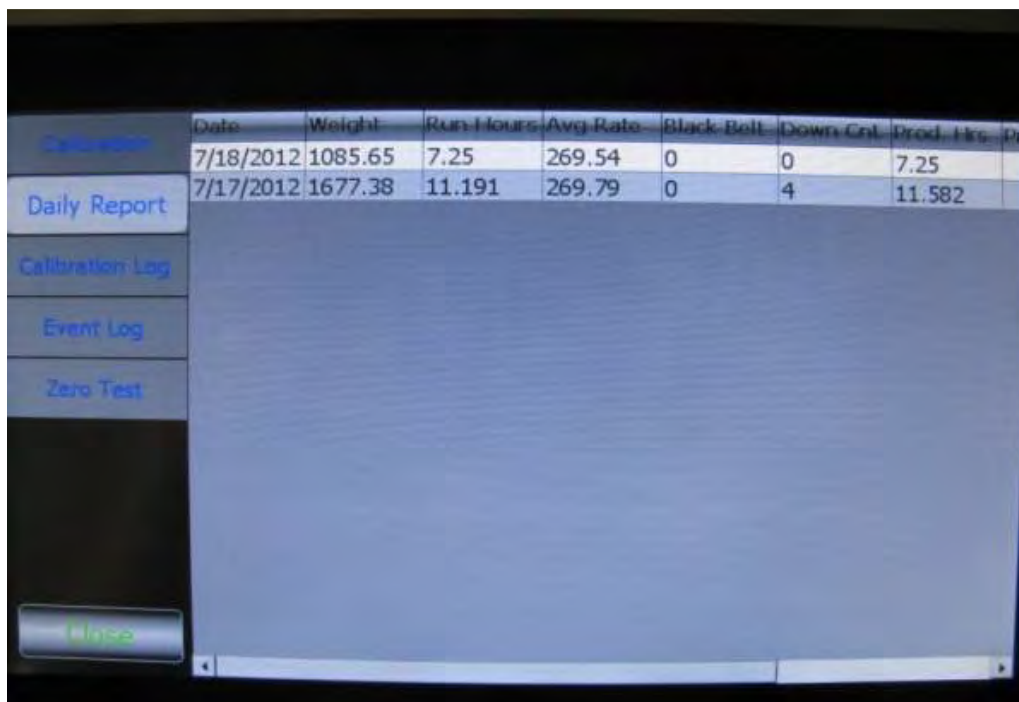
Single View “Detailed Information”

While looking at a specific scale you can select “Scale Info” and view detailed information.

Calibration	Lime			
Daily Report	Zero	4983	Last Zero	7/17/2012 1:30 PM
Calibration Log	Span	2142	Last Span	5/16/2012 8:57 AM
Event Log	Zero Cutoff	5534	Belt Length	25.02193
Zero Test	Idler Span	8	Angle	0
	ADC Gain	20	Analog Out	9777
	Scale Weight	145.5	Inputs	16
	Load Cell AD	30053	Outputs	0
	IP Address	192.168.1.53	Hardware Ver	WSMB2.1
	Standard Rate	160	Software Ver	Ver: 3.1.15b
	Last Update	00:00:01		

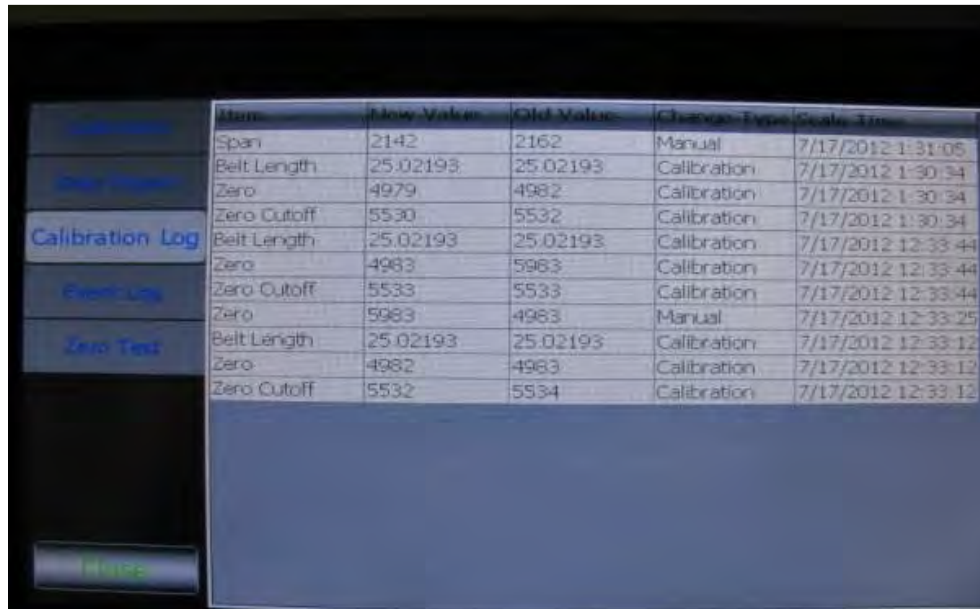
While in this screen you can select from four (4) additional screens to view by simply touching the cell

1. View Daily Report



	Date	Weight	Run Hours	Avg Rate	Black Belt	Down Cnt	Prod. Hrs	Prod
Calibration	7/18/2012	1085.65	7.25	269.54	0	0	7.25	
Daily Report	7/17/2012	1677.38	11.191	269.79	0	4	11.582	
Calibration Log								
Event Log								
Zero Test								

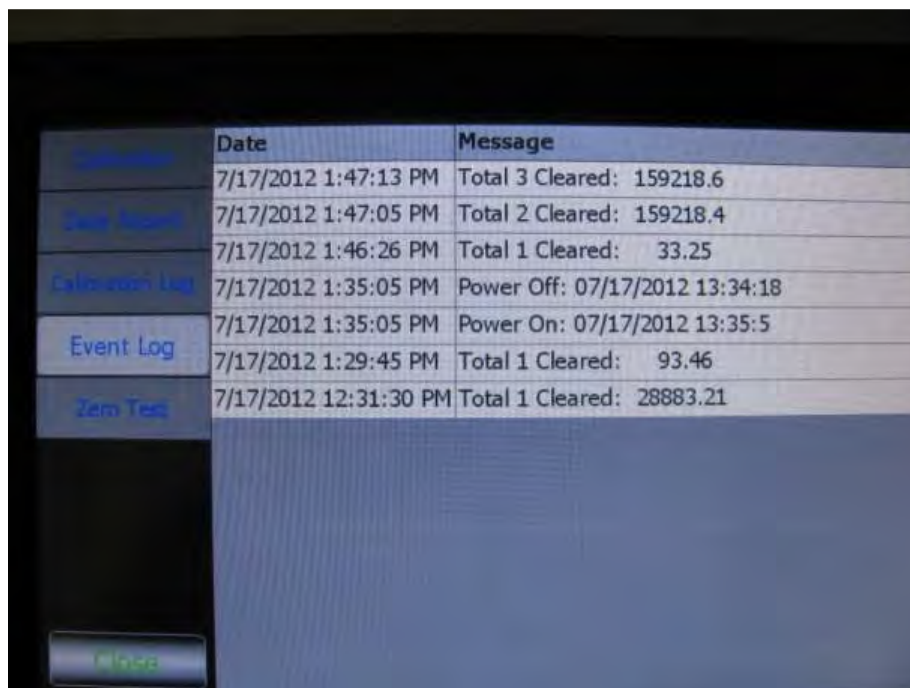
2. View Calibration Log



The screenshot shows a handheld device screen with a menu on the left and a data table on the right. The menu includes options like 'Calibration Log', 'Event Log', and 'Zero Test'. The 'Calibration Log' option is highlighted. The table displays calibration events with columns for Item, New Value, Old Value, Clearing Event, and Scale Time.

Item	New Value	Old Value	Clearing Event	Scale Time
Span	2142	2162	Manual	7/17/2012 1:31:05
Belt Length	25.02193	25.02193	Calibration	7/17/2012 1:30:34
Zero	4979	4982	Calibration	7/17/2012 1:30:34
Zero Cutoff	5530	5532	Calibration	7/17/2012 1:30:34
Belt Length	25.02193	25.02193	Calibration	7/17/2012 12:33:44
Zero	4983	5983	Calibration	7/17/2012 12:33:44
Zero Cutoff	5533	5533	Calibration	7/17/2012 12:33:44
Zero	5983	4983	Manual	7/17/2012 12:33:25
Belt Length	25.02193	25.02193	Calibration	7/17/2012 12:33:12
Zero	4982	4983	Calibration	7/17/2012 12:33:12
Zero Cutoff	5532	5534	Calibration	7/17/2012 12:33:12

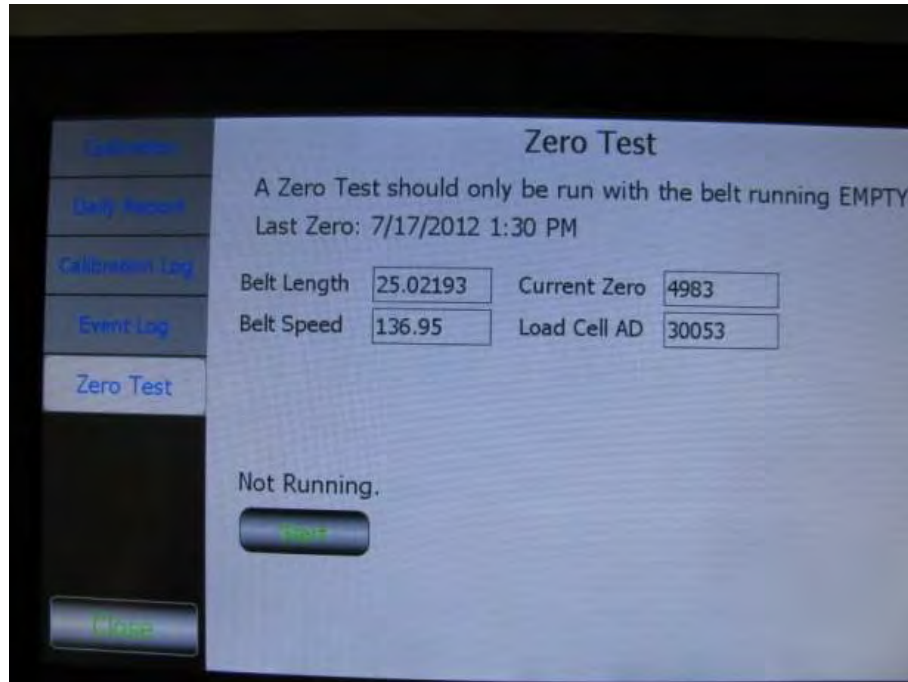
3. View Event Log



The screenshot shows the same handheld device screen with the 'Event Log' option highlighted in the menu. The table displays system events with columns for Date and Message.

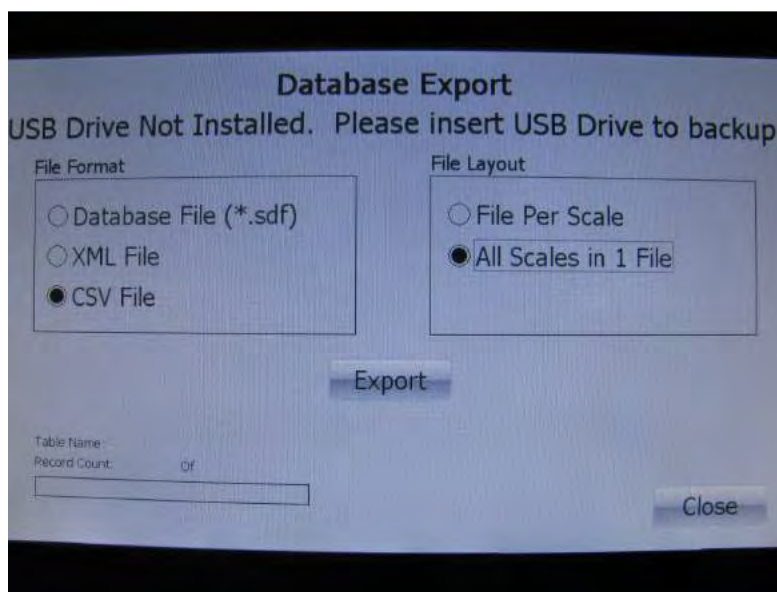
Date	Message
7/17/2012 1:47:13 PM	Total 3 Cleared: 159218.6
7/17/2012 1:47:05 PM	Total 2 Cleared: 159218.4
7/17/2012 1:46:26 PM	Total 1 Cleared: 33.25
7/17/2012 1:35:05 PM	Power Off: 07/17/2012 13:34:18
7/17/2012 1:35:05 PM	Power On: 07/17/2012 13:35:5
7/17/2012 1:29:45 PM	Total 1 Cleared: 93.46
7/17/2012 12:31:30 PM	Total 1 Cleared: 28883.21

4. Perform ZERO Test



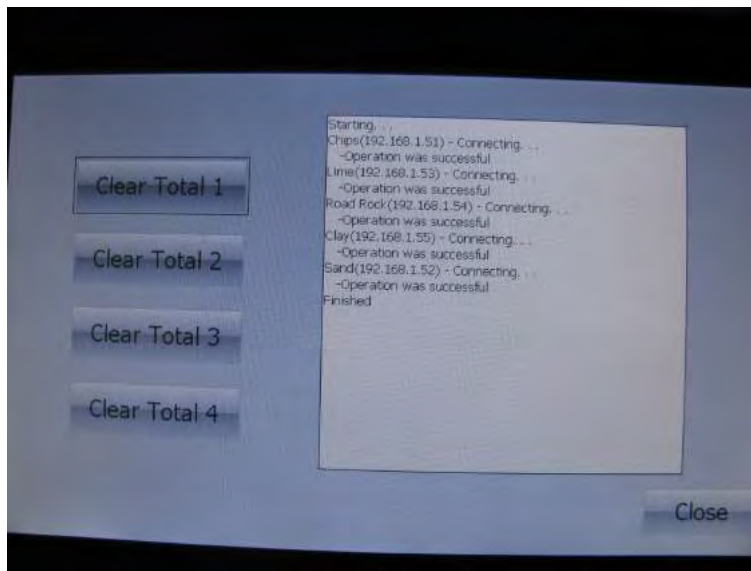
(Belt MUST be empty during this test)

Data Backup



On this screen you will select the format in which your data will be backed up to the Thumb Drive. We recommend using CSV as shown since this format will easily insert into Excel and provide a Manageable Report.

Clear All



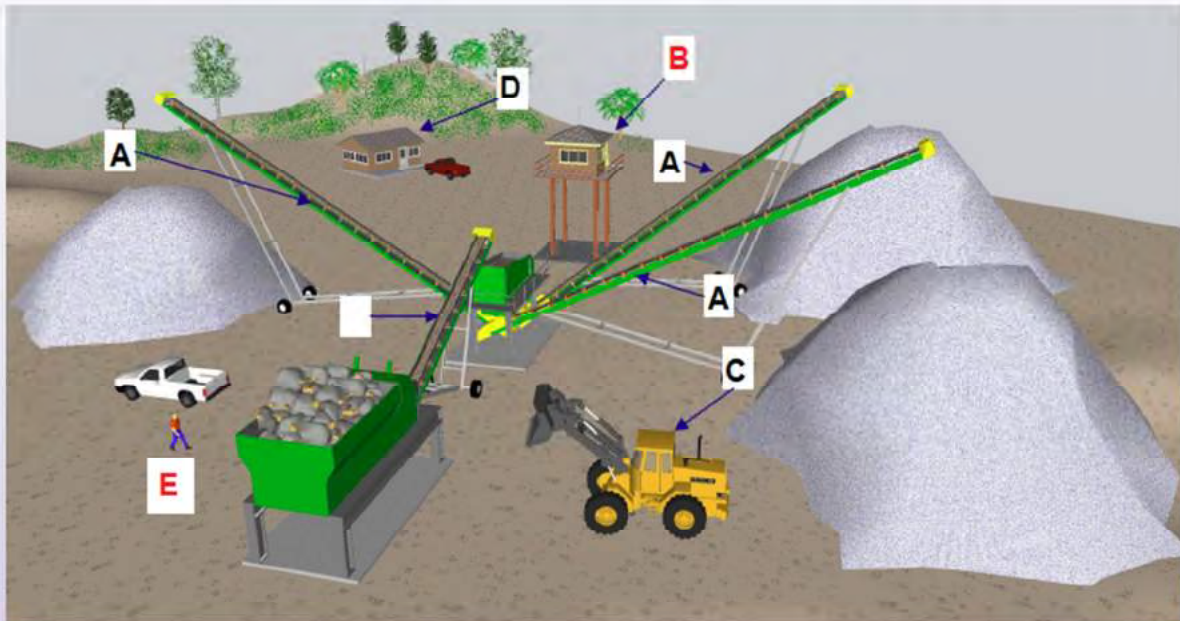
Our scales have four (4) individual totalizers. Total 1 is your Daily Total that is found on Line 1 of the default screen. Each total can be cleared at the scale or via the Remote Display 3. When this function is performed at the RD3 the screen will indicate if the step was successful.

****When adding additional Scales to a Network you may have to do the following:***

If the new scale is not being seen on the Multi View Screen you will need to put the RD3 on the Single View Screen and let it cycle through until it the scale is seen by the RD3. You can than switch back to Multi View.



Sample Network



A. Weigh Shark Scales Measuring Production & Transmitting Data via Wireless Radio

B. Weigh Shark Remote Display 3 in Control Tower Monitoring Plant and Pushing information up to the [AGGLINK Cloud Service](#)

C. Loader Wirelessly Monitoring Plant Via RD 3 Lite

D. Office CPU Monitoring Plant Production Wirelessly via Radio

E. Plant Manager Viewing Scale on his Phone or Tablet via [AGGLINK Cloud Service](#)

Plant Efficiency: 78% 07:19:27 03/07/2012

Scale Name	Total	Rate	Speed	Eff %
C4	2697.9	163.1	254.4	87%
C7	3994.5	233.7	316.2	87%
C9	4397.6	276.6	221.4	102%
C1	21.4	1355.3	546.7	100%
C6	3976.7	241.4	246.0	97%
C5	3814.5	221.8	235.6	80%

Scrolling ☒ ON

Single View Multi-View Menu



Network Setup



The screenshot shows a 'Network Settings' window with the following fields and options:

Field	Value	Option	Value
IP Address	192.168.1.50	Master Remote	<input checked="" type="checkbox"/>
Network Mask	255.255.255.0	Web Server	<input checked="" type="checkbox"/>
Gateway	192.168.1.1		
Name Server	192.168.1.1		
Network Name	WeighShark01		

A 'Close' button is located at the bottom right of the window.

Use this screen to enter in your Remote Display 3 IP Address and Network Settings. If you will not have a PC on your network, you can use the default settings. If you will include a PC you will need to enter in IP address settings based on your PC's Network Settings.

You can also Name the Remote Display 3 here to what you want to see on the display and on your PC.



9.0 Network Setup

TCP/IP networks can range anywhere from a simple network consisting of a few computers or devices to a very complicated network consisting of millions of devices spanning the globe. Each and every network is different so it is impossible to address every different configuration or option. It is highly recommended that a local networking specialist is consulted if the scales or remote displays are to be added to an existing network. If a network is already in place usually the person responsible for setting it up will be able to provide assistance.

9.1 Networking Overview

Because of the complexities of networking it is beyond the scope of this manual to try to completely address the complete subject of Networking. However the section will try to explain in simple terms what the different network IP address mean.

Figure 2 on page 2-2 shows a very basic network consisting of some scales, a PC and an Internet connection.

- **IP Address** – Is a group of 4 numbers ranging from 0 to 254, separated by periods. Each device on the network must have a unique IP address. (Examples: 192.168.1.254, 10.251.5.1, 64.89.22.1)
- **Subnet Mask** – A group of 4 numbers, usually, but not always 255, separated by periods. This number determines which group of numbers in the IP address defines the network and which numbers define the hosts (devices on the network).

Example 1:

IP Address: 192.168.1.5
Subnet Mask: 255.255.255.0

The "192.168.1" portion of the IP address defines the network as a whole. The last number "5" determines the unique device on that network. So for the network 192.168.1.x there can be up to 254 devices. (192.168.1.1, 192.168.1.2, 192.168.1.3 and so on up to 192.168.1.254)

Example 2:

IP Address: 172.16.125.63
Subnet Mask: 255.255.0.0

The first 2 groups of numbers, 172.16, define the network as a whole. The last 2 groups of numbers define the devices on the network. For this network there can be over 65,534 devices on the network.

- **Gateway** – The IP address of the device that connect this network to another network. In Figure 2 on page 2-2 the gateway device would be the Firewall/Router because it connects this network to another network, the Internet. If a device wants to talk to another device outside its network it will try to do it thru the Gateway device.
- **Name Server or DNS Server** – This is the address for the Domain Name Service Server (DNS). A DNS server converts the easy to remember Internet addresses, like www.google.com, to its IP Address that the computer understands. In many networks the DNS server address is the same as the Gateway because the Gateway can forward name requests on to a known DNS server.



9.2 Where to get IP Addresses

If the network is a brand new network and is only for the Weigh Shark belt scales and Remote Displays then using the factory default settings is easiest. The factory default IP address of the scales is 192.168.0.100. The Remote Display default IP address is 192.168.0.200. As long as every scale and Remote Display has the last group of numbers unique then everything should work without any problems. Read the Quick Setup section of this manual for more information.

If there is an existing network then it is best to contact the people who set up the network or is responsible for maintaining the network. If there is no one on staff that understands networking hiring a network consultant is a good idea.

There are a few things that can help get started with an existing network.

- To find the IP address of a Windows XP computer.
 - Click Start > Control Panel > Network Connections. This will display all the network connections configured for that computer.
 - If the computer is on the network there should be connection call something similar to "Local Area Connection".
 - Double click the "Local Area Connection" icon.
 - Select the "Support" tab.
 - This will display the Connection Status for that network connection. This can help determine what the current network configuration is.
- To see if an IP address is already used on the network.
 - Click Start>Run
 - Type "cmd". (cmd only, no quotes)
 - Click OK.
 - This should display the Windows Command prompt. A black window with a flashing cursor.
 - If you want to see if 192.168.1.6 is used.
 - Type at the cursor> ping 192.168.1.6 Then press enter.
 - If that IP address is on the network you will get a Reply back.
 - If that IP address is not on the network it will display a Request Timed out.
 - Below is a screen shot of a successful ping.

```
C:\WINDOWS\system32\cmd.exe
C:\>ping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Reply from 192.168.1.2: bytes=32 time=2ms TTL=64
Reply from 192.168.1.2: bytes=32 time=1ms TTL=64
Reply from 192.168.1.2: bytes=32 time=1ms TTL=64
Reply from 192.168.1.2: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms
C:\>
```

- This test can be useful in determining the operation of the network and if devices are properly configured and connected to the network.



13.0 Network Wiring

Cat5e should be used for connecting scale to the network. If wiring is to be run outdoors then outdoor rated Ethernet cable should be used. Most electrical supply houses can get Cat5e outdoor Ethernet cable. Contact the factory if there is difficulty finding the correct cable.

Cat5e cable consists of 4 twisted pairs or wire. The twist in the wire is VERY important; when working with the cable do not untwist the pairs anymore than necessary.

13.1 Network Topology

Standard copper Ethernet has a distance limit of 100m (328ft) per segment. A segment is the connection from one device to the next. (i.e. The distance from a Scale or Computer to the network switch.)

The distance can be increased in a few different ways:

- Add a Network Switch. A Switch allows the signal to be “repeated” another 100m/328ft to another Switch. Multiple switches can be cascaded together to get the desired distance.
- Convert to Fiber Optic. Fiber optic is a fast, secure connection that can span very long distances (up to 6,600ft). It is also immune to lightning strikes. The cost is usually fairly high.
- Convert to Wireless. This option is the easiest and cheapest way to extend the distance of wired Ethernet. There are many off the shelf wireless Ethernet solutions that can be configured for almost any application. It is best to consult a local wireless Ethernet expert when setting up a wireless network.

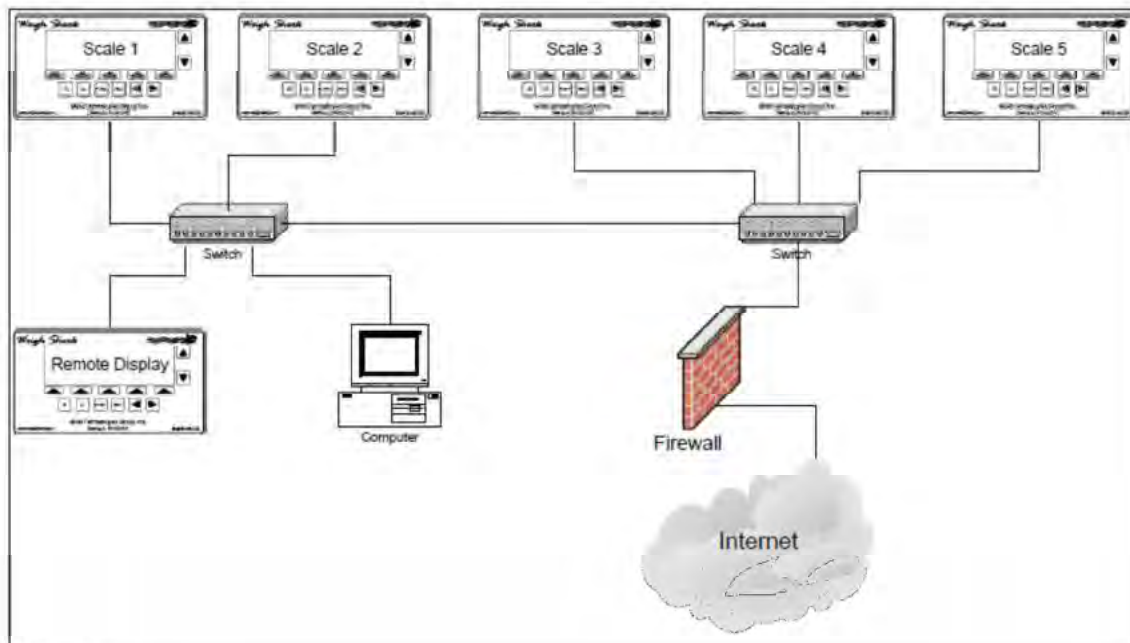
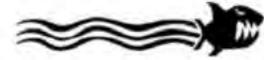


Figure 11

Figure 11 shows a typical network setup. All scales, computers and other devices all terminate to switches. Network Switches are available as small as 4 ports up to 100's of ports. In the above example the maximum wire distance from Scale 1 to Scale 5 would be 984ft. There are 3 network segments between Scale 1 and Scale 5; Scale 1 to the switch, switch to switch, Scale 5 to switch.



13.2 Cable Wiring

There are different methods of terminating Cat5e cable.

- RJ45 Plug

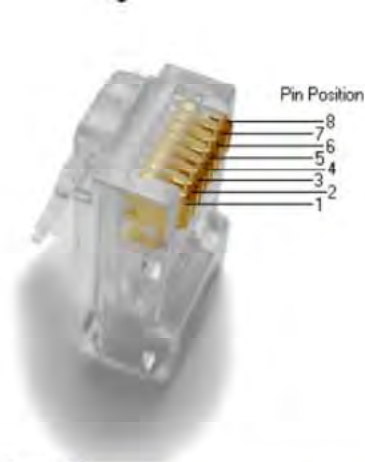


Figure 12
(Source: <http://en.wikipedia.org/wiki/TIA/EIA-568-B>)

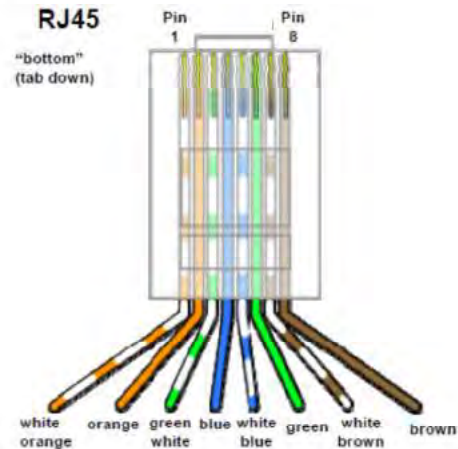


Figure 13
(Source: http://en.wikipedia.org/wiki/Category_5_cable)

RJ45 Plugs can be difficult to wire. A few practice cables should be made and verified that they work before attempting the "real thing".

- RJ45 Jack



Figure 14
(Source: Belkin Cat5e RJ45 Jack, Blue)

RJ45 Jacks can be the easiest to wire because it is as simple as "punching down" the wires with the correct punch down tool. Once a RJ45 jack has been installed a short pre-made patch cable can be used to connect the jack to the device (scale, computer, switch, etc.).

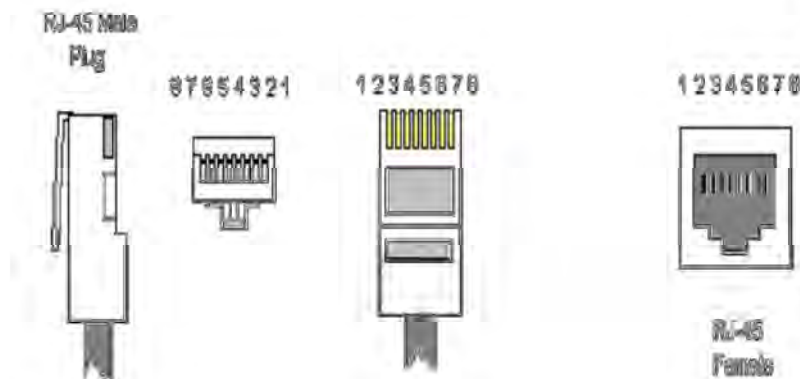
RJ45 jack, plugs and the necessary tools can be found at almost any electrical supply store, large office supply/computer store or home improvement store.

Suggestions for running Cat5e cable:

- Do NOT allow the wire to kink into tight knots.
- Do NOT bend tight around corners.
- Do NOT run with high voltage wiring. Keep as far away as possible. If it must cross high voltage wiring cross at a 90° angle.
- Do NOT let cable span long distances without support. Provide support for the cable along the entire length of the cable.

Ethernet Cables - RJ45/Colors & Crossover - Illustration

Page 1 of 2



Color Standard
EIA/TIA T568A

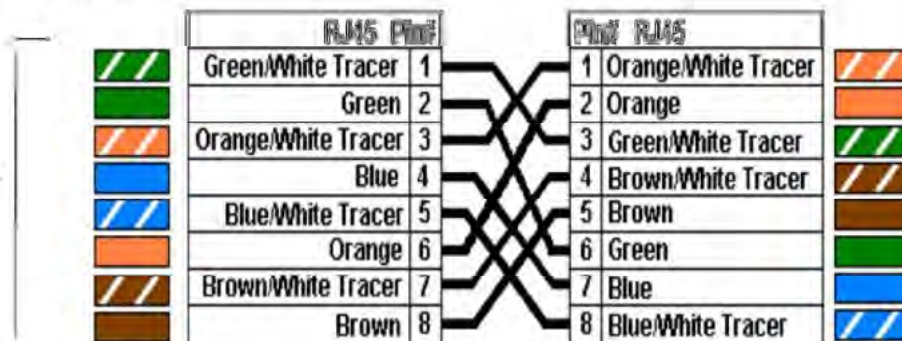
Ethernet Patch Cable



Color Standard
EIA/TIA T568A

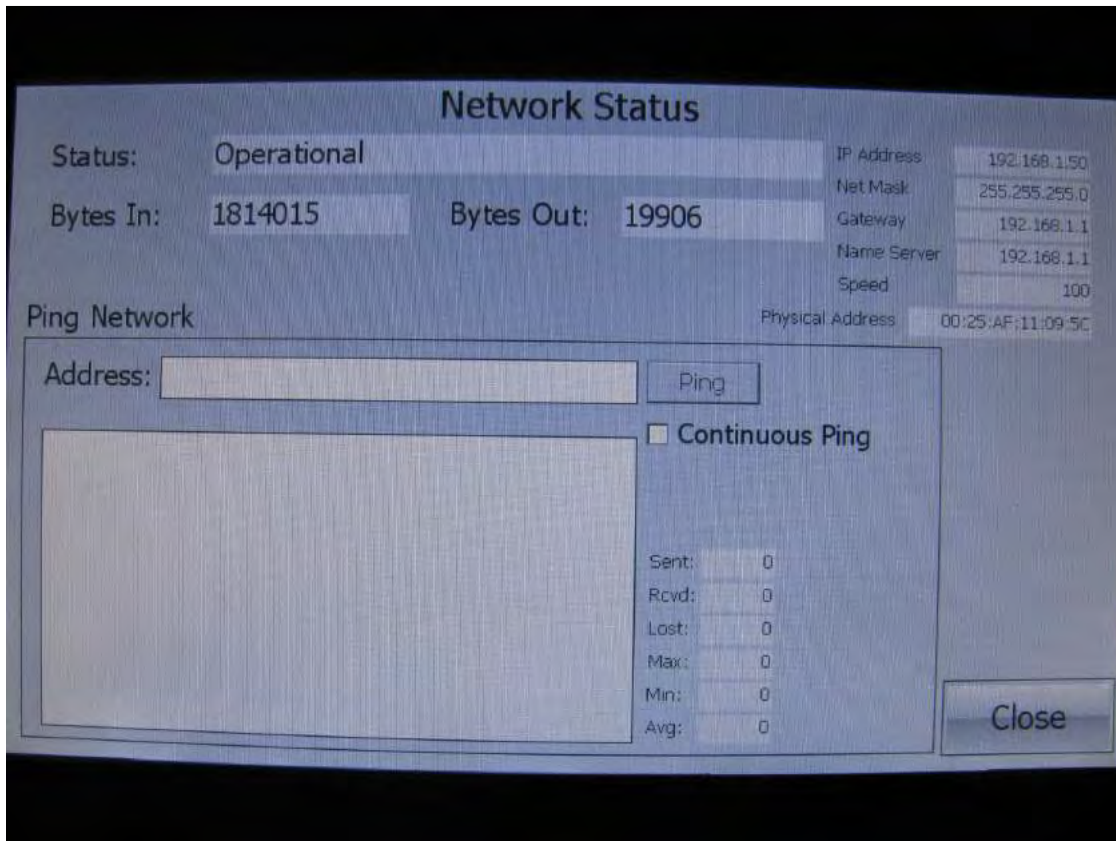
Ethernet Crossover Cable

Use this wiring for direct Scale to Remote connection



"A" is earlier

Network Status



This screen gives you a quick update on your Network Status. You can also *Ping your scales to verify that each scale is communicating with RD 3. Your network speed can also be viewed here.

* "Ping is a basic program that allows a user to verify that a particular IP address exists and can accept requests. Ping is used diagnostically to ensure that a host computer the user is trying to reach is actually operating. Ping works by sending an Internet Control Message Protocol (ICMP) Echo Request to a specified interface on the network and waiting for a reply. Ping can be used for troubleshooting to test connectivity and determine response time."

RD3 File Formats

The RD3 exports 6 different file types when backing up data to a USB drive using the XML or CSV file formats. When exporting as "File per scale" the scale name will be included in the file name. Below is a description of each file format.

Scales

Column Name	Description
ScaleID	Unique identifier for each scale
ScaleName	Name assigned for each scale
Total	The current total from the scale display
ScaleIP	The scale IP address
Rate	The current rate from the scale display
Speed	The current speed from the scale display
StdRate	The standard rate for the scale as entered at the scale.
Units	0 = English Units, 1 = Metric
Ver	Version of data packet
LastUpdate	Date and Time of last update from the scale
ZeroCal	Zero calibration number
SpanCal	Span calibration number
ZeroCutOff	Zero Cut Off value
IdlerSpan	Idler Span value
BeltLength	Length of belt
Gain	Gain setting
LastZeroTest	Date and Time of last Zero Test
LastSpanTest	Date and Time of last Span Test
NumberOfLoadCells	Number of load cells in the scale
LCCapacity	Capacity of the load cells
SoftwareVer	Scale software version
HardwareVer	Scale hardware version
SortOrder	The order to display on the remote screens
AllowClear	If TRUE scale will be included in the Clear All function
DisplayTime	How many seconds to stay on screen while scrolling on Single View screen
IsVisible	Show scale on remote screens
UseInOEE	Use scale data in plant OEE calculations

Weight Log

Column Name	Description
UniqID	Unique identifier for each record
ScaleID	Scale ID
LogUniqID	UniqID assigned by scale
Weight	This is the total Lbs. or Kg accumulated in the last time interval defined in [LogTime]
RunTime	The number of seconds the scale ran a rate above the Minimum Rate setting. The Minimum Rate setting is set at each scale under the Setup>Calibration Setup menu. The factory default is 10tph. Example: If Minimum Rate is set at 25tph and the Log Time is set to 6 minutes. If the scale ran 15tph for 2 minutes and 50tph for 4minutes the runtime field will show 240.
DownCounts	The number of time the scale when from running to not running. By default this is based on the Minimum Rate setting in the scale.
ProdTime	The number of seconds that production has been running. By default this is based on the belt running. Can also be programmed to use a digital input from the scale.
ProdDownCount	The number of time production has gone from running to not running.
AuxCount	The number of counts in the Auxiliary counter. The Auxiliary counter can be programmed to count the pulses from a digital input.
AuxTime	The number of seconds that the Auxiliary counter input has been 'ON'.
IsRunning	Either 0 or 1. Indicates that the scale was running over Minimum rate when the record was logged.
IsProduction	Either 0 or 1. Indicates that the scale was running production when the record was logged. By default this is the belt running.
IsAux	Either 0 or 1. Indicates that the Auxiliary input was ON when the record was logged.
LogTime	The number of seconds since the last record was written to the log file. Usually this is the same as the Logging Interval unless the record was written at power up.
TimeStamp	Local time from the scale when the record was logged.
ServerLogTime	Local time from the RD3 when the record was written to the database
ModelID	Plant ModelID. (Not implemented yet.)
Archived	Record has been sent to AggLink.
StdRate	Standard Rate value when the record was logged.

Day Weight Log

Column Name	Description
UniqID	Unique identifier for each record
ScaleID	Scale ID
Weight	This is the total Lbs. or Kg accumulated for the day.
RunTime	The number of hours the scale ran a rate above the Minimum Rate setting. The Minimum Rate setting is set at each scale under the Setup>Calibration Setup menu. The factory default is 10tph. Example: If Minimum Rate is set at 25tph and the Log Time is set to 6 minutes. If the scale ran 15tph for 2 minutes and 50tph for 4minutes the runtime field will show 240.
DownCounts	The number of times the scale when from running to not running. By default this is based on the Minimum Rate setting in the scale.
ProdTime	The number of hours that production has been running. By default this is based on the belt running. Can also be programmed to use a digital input from the scale.
ProdDownCount	The number of times production has gone from running to not running.
AuxCount	The number of counts in the Auxiliary counter. The Auxiliary counter can be programmed to count the pulses from a digital input.
AuxTime	The number of hours that the Auxiliary counter input has been 'ON'.
LogTime	The number of hours since the last record was written to the log file. Usually this is the same as the Logging Interval unless the record was written at power up.
TimeStamp	The record date
ServerLogTime	Local time from the RD3 when the record was updated to the database
ModelID	Plant ModelID. (Not implemented yet.)

Hourly Weight Log

Column Name	Description
UniqID	Unique Identifier for each record
ScaleID	Scale ID
LogDate	Date for the record.
W0 – W23	Tons accumulated in the given hour
T0-T23	Hours of run time in the given hour
LastUpdate	Local time from the RD3 when the record was updated to the database

Calibration Log

Column Name	Description
CalLogID	Unique identifier for each record
ScaleID	Scale ID
CalLogUniqID	Unique ID from scale
LogType	Always 1
OldValue	Old value
NewValue	New value
LogTypeID	1 = Manual change – value was changed from the keypad. 2 = Auto – value automatically changed by scale software. (i.e. Auto Zero) 3 = Calibration – value changed during calibration test. (i.e. Zero or Span test)
ItemID	1 = Zero 2 = Span 3 = Belt Length 4 = Idler Span 5 = Gain 6 = Zero Cutoff 7 = Wheel Diameter 8 = Pulses Per Rev 9 = Units 10 = Auto Zero % 11 = Minimum Rate 12 = Standard Rate
ScaleTimeStamp	Time record was logged at the scale
ServerTimeStamp	Time record was logged at the RD3
Archived	Record uploaded to AggLink

Event Log

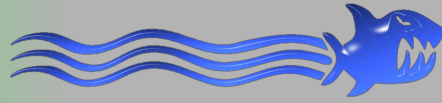
Column Name	Description
EventLogID	Unique identifier for each record
ScaleID	Scale ID
EventUniqID	Unique ID from scale
TypeID	Event TypeID
Message	Log Message
ScaleTimeStamp	Time record was logged at the scale
ServerTimeStamp	Time record was logged at the RD3
Archived	Record uploaded to AggLink

Create an AggLink Account and Add a Gateway

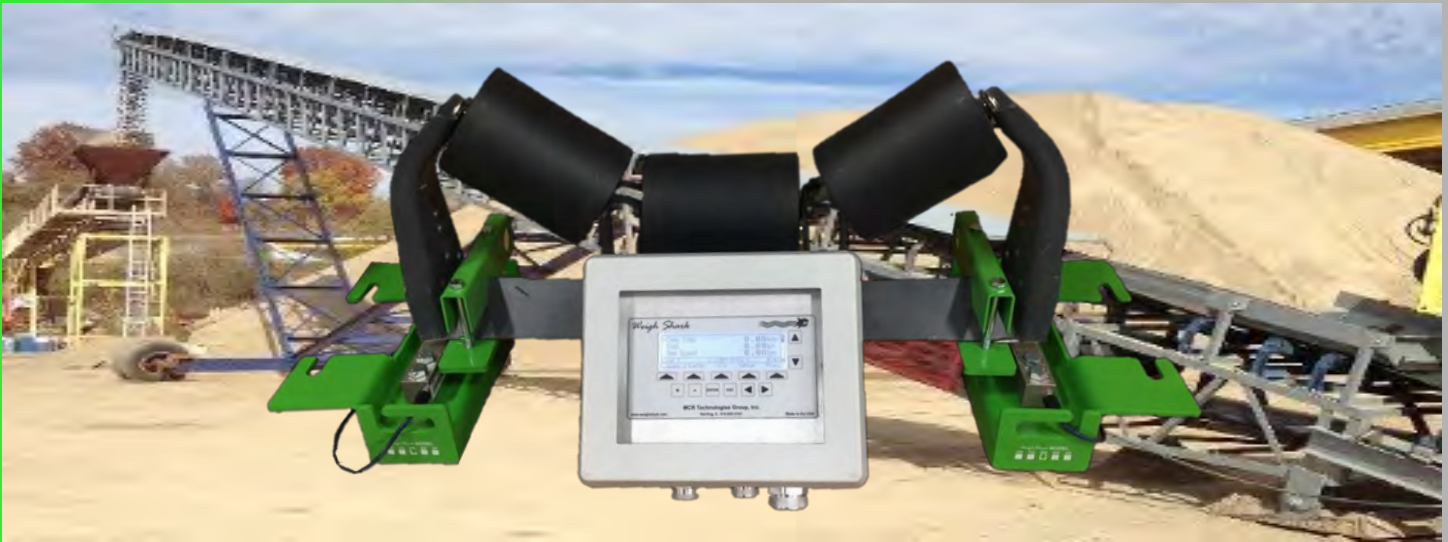
- Using your web browser go to: <http://agglinkv5.azurewebsites.net/>
- In the top right corner click on “Register” link.
- Fill in the necessary information. (You can select your own user name.)
- Be sure the email is a valid account that you receive emails with.
- After clicking Register button it will indicate that a confirmation email has been sent.
- You should receive an email within a few minutes from **AggLink Admin** no-reply@agglink.com containing a link to confirm your account.
- Once your account is confirmed and you are logged in go to Settings menu and select Gateways.
- In the Gateways screen, select Create New.
- Enter a name and description for your gateway. (Your gateway is either your Remote Display 3 or hardware for a single scale connection.)
- Enter your API Key.
 - Remote Display 3. The API Key is found in the Cloud Services menu.
 - Single Scale interface. The API Key can be found on a label attached to the hardware.
- Click Create.
- Once the Gateway makes a connection to AggLink, your scales will show up under the Scales menu. This may take a few minutes depending on the gateway and the internet connection.

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Home of the *Weigh Shark*, not just another scale company!



Belt Scales & Integrator: Standard Troughing, Channel Inserts, European “Wing” B & C and Introducing our **New kW (Electric) Scale**



Remote Displays: View all your scales LIVE in your plant

Plant Efficiency: 78% 07:18:27 03/07/2012

Scale Name	Total	Rate	Speed	Eff %
C4	2697.9	163.1	254.4	47%
C7	3994.5	233.7	316.2	67%
C9	4397.6	276.6	221.4	102%
C1	21.4	1355.3	546.7	100%
C6	3976.7	241.4	246.0	97%
C5	3814.5	221.8	235.6	63%

Scrolling ☒ ON

Single View Multi-View Menu

Plant Efficiency: 78% 07:18:15 03/07/2012

C3

Daily Total **7066.17** Rate **272.9**

Speed **221.4** Load % **51%**

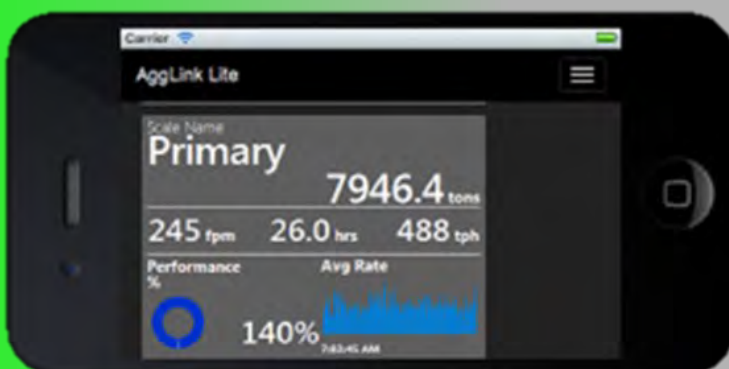
Real Time % **78%**

Scale Info

Scrolling ☒ ON

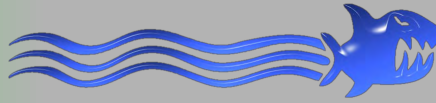
Single View Multi-View Menu

AggLink: View your scales LIVE through the Cloud from ANYWHERE!



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Belt Scales

- ♦ Easy to install and calibrate
- ♦ Fits any size belt
- ♦ Standard accuracy from $\pm 1\%$ to $\pm .125\%$ *
- ♦ Easy prompt calibration on graphic display

kW Electric Belt Scales (NEW)

- ♦ Measures amp draw off electric motors
- ♦ No load cells
- ♦ No speed sensor
- ♦ No moving parts
- ♦ No calibration weights required
- ♦ Easy install 1 hour by your electrician
- ♦ kW scale accuracy $\pm 1\%$ *

Remote Displays

- ♦ 7" and 10" TFT Color LCD screen w/LED back-light
- ♦ 1-USB Port
- ♦ Clear scales / run Zero Test
- ♦ SDRAM 512MB / NAND FLASH 256MB/ARM Cortex-A8 1 GHz
- ♦ WEB interface with data logging
- ♦ Multi scale viewing up to 16 scales

Integrator

- ♦ 4 Digital Inputs
- ♦ 4 Digital Outputs
- ♦ 4-20mA (16bit) Current Loop
- ♦ Ethernet—HTTP Web Server ready
- ♦ RS 232 and RS 485 Serial Ports
- ♦ Modbus TCP via Ethernet
- ♦ Modbus RTU via RS 485 Port
- ♦ Accepts 110/220 Vac and 12/24Vdc

*** Accuracy ***

- ♦ Based on single idler through quad idlers
- ♦ Proper installation, calibration per instruction manual
- ♦ Load cell capacity selected by application
- ♦ Mechanical factors can limit accuracy

AggLink

- ♦ Remote reporting and monitoring on any device
- ♦ No PC required on-site
- ♦ No databases to manage
- ♦ 1 plant or 100's of locations
- ♦ Any type of internet connections
- ♦ Cellular data service plans available
- ♦ Smart phone and tablets supported (iOS, Android, Windows)

2-Year Limited Warranty on parts against defective workmanship and failure

MCR Technologies Group, Inc is a North American Distributor for the following German companies



Digital Metal Detector

CONVEYOR
SAFETY SWITCHES



Analog Metal Detector

MCR Technologies Group, Inc.

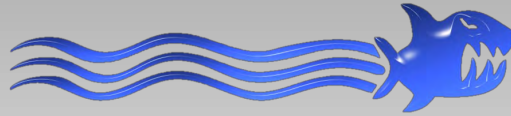
P.O. Box 1016 Sterling, IL 61081

815-622-3181

www.weighshark.com sales@weighshark.com

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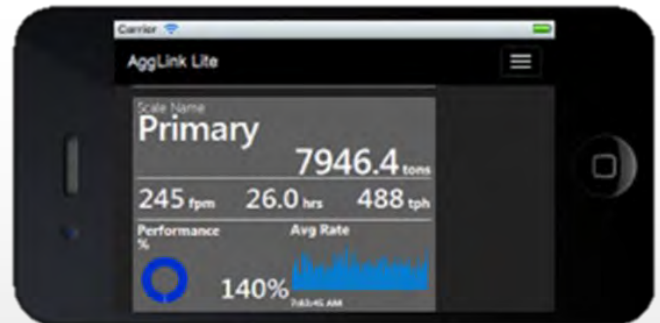
Belt Scales & Integrator: Standard Troughing, Channel Inserts, European “Wing” B & C and Introducing our **New kW (Electric) Belt Scale**



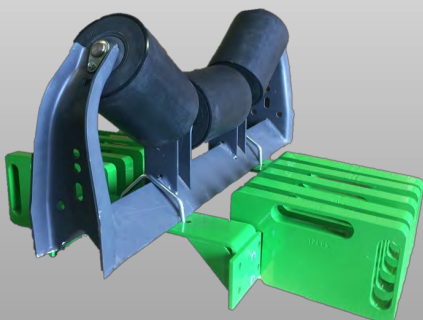
Remote Displays: RD3 Networking up to 16 conveyors at the same time

Plant Efficiency: 78%				
07/18/27 03:07/2012				
Scale Name	Total	Rate	Speed	Eff %
C4	2697.9	163.1	254.4	47%
C7	3994.5	233.7	316.2	67%
C9	4397.6	276.6	221.4	102%
C1	21.4	1355.3	546.7	100%
C6	3976.7	241.4	246.0	97%
C3	3814.5	221.8	235.6	63%
Scrolling <input checked="" type="checkbox"/>				
Single View Multi-View Menu				

AggLink: Networking through the Cloud from ANYWHERE!



Calibration Kit: Weights and Bracket for all models - Troughing, and Wing Idlers - Each weight weighs #12

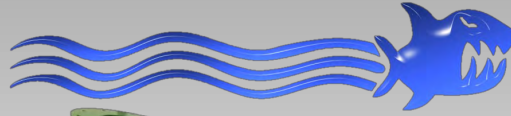


Printers: For your everyday requirements, 12 VDC, 24 VDC and 110 VAC



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Solid Impact Flow Meter -
For Dry, Flowable Products



EAB Metal Detectors (Analog)

Protect equipment and prevent metal objects from contaminating products.



Magnets - Permanent and Electromagnet with
manual and self clean



Kiepe— Monitoring Devices for Conveyor Systems



Cassel (Digital)– Metal Detectors



- * 2-Year limited warranty on parts and labor against defective workmanship and failure
- * Free call in technical support
- * Nationwide Distributors

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AggLink Application Form

(Please answer all questions)

Name of Distributor -

Contact Name -

Contact Email –

Contact Number-

Name of Company to use AggLink?

Contact Person-

Contact Email-

Contact Number-

Location of requested service (s)-

Number of scales?

How many locations?

Do you have internet at each site?

Can you use the internet?

Will you use a hotspot?

Do you currently have Weigh Shark Remote Display (RD 3) on site?

Who is your cell phone provider?

How good is the cell phone service at the site?

Do you currently have AGGLINK?

Is this a stationary plant?

Is this a portable plant?

Do you already have a AggLink Account?

MCR Technologies Group, Inc
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www.weighshark.com
sales@weighshark.com

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Digital Metal Detector



Analog Metal Detector

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kW Application Form

(Please answer all questions)

- 1) Generator of Commercial power:
- 2) Single Phase or Three Phase:
- 3) Delta or Wye:
- 4) VFD: Yes or No
- 5) Soft Start: Yes or No
- 6) Line-To-Neutral Voltage:
- 7) Line-To-Line Voltage:
- 8) Approximate angle of the conveyor:
- 9) Length of the conveyor:
- 10) Motor HP or KW rating:
- 11) Number of Motors on the conveyor:
- 12) Line Frequency: 50Hz or 60Hz
- 13) Is there a neutral wire running to the motor?
- 14) Is there a current carrying natural to the motor?
- 15) Amp draw when conveyor is empty and running?
- 16) Amp draw when conveyor is loaded and running?

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Belt Scale Application Form (Rev. 07/16/2020)

Company: _____

Contact Name: _____

Phone: _____

Email: _____

Application Data:

Project or Conveyor Name: _____

Material Conveyed: _____

Wet or Corrosive Application: _____

Type of Equipment to be installed on: _____

Belt Width: _____

Belt Speed: _____

Idler Spacing (Center to Center): _____

Max Tons Per Hour: _____ Min Tons Per Hour: _____

Conveyor Length: _____

Idler Type: B, C, or D (Type E or F requires a Heavy Duty Application)

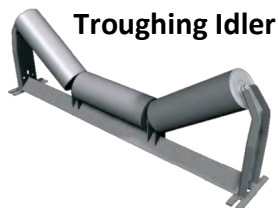
Does Conveyor Belt Angle Change during operation (up/down or side to side): _____

Accuracy Desired: _____

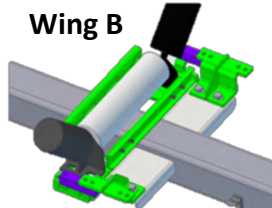
Power Source: Direct line or Generator _____

Idler Design: _____ (Please submit photo of idler)

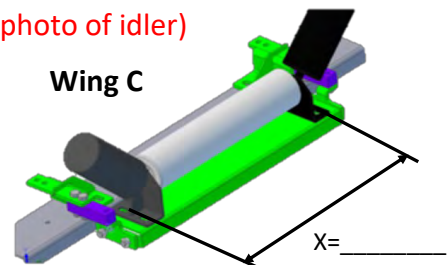
Note—When used with portable equipment the accuracy could decrease based on the type of load and installation.



Troughing Idler



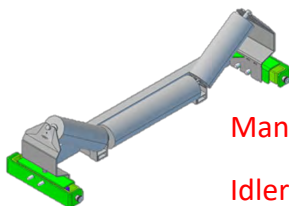
Wing B



Wing C

Provide "X" dimension for Wing

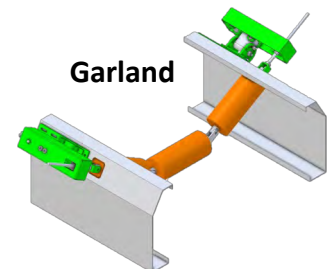
CIT - Channel Insert Idler



Required For CIT Idler

Manufacture Name _____

Idler Model _____



Garland

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Analog Metal Detector

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Calibration Weights

- 

Scale Name	Total	Rate	Speed	Eff %
C4	2697.9	163.1	254.4	47%
C7	3994.5	233.7	316.2	67%
C9	4397.6	276.6	221.4	102%
C1	21.4	1355.3	546.7	100%
C6	3976.7	241.4	246.0	97%
C5	3814.5	221.8	235.6	63%

[illegible]

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