Flex

BY REPROSCAN

Applications Guide

Repro Scan

Flexx

Available Probes

Probe	Features	Common Examinations	Tips and Considerations
 **6.5 MHz L64 Linear Rectal**	- Waterproof - 5.0 to 9.0 MHz - 2 m (7')& 3m (10') probe cords - Works with Linear ReproArm	Beef - arm in early pregnancy, fetal sexing Dairy - early pregnancy (28 days), ovarian exams, fetal sexing Equine - early pregnancy, ovarian exams, tendons	- Depth setting - 7 - 9cm - 2m probe cord for use with goggles - 3m probe cord for use with a monitor
 **4.0 MHz C60 Convex Rectal**	- Waterproof - 2.5 to 5.0 MHz - 2 m (7')& 3m (10') probe cords - Works with Regular, Shorty and Kiwi ReproArms	Beef - extension arm, fetal aging, sale barns and feed yards Dairy - extension arm seasonal dairy, fetal aging Sheep and Goat - pregnancy transabdominally Equine-useful for pregnancy after about 22 days	- ReproArms save injuries - depth settings 11 to 20.8 - 2m probe cord for use with goggles - 3m probe cord for use with a monitor
 **3.5 MHz C60 T-Handle Convex**	- 2.0 to 5.0 MHz - scanning depth 6 to 20.8 cm	Beef and dairy calves– abdominal exams, thoracic (lung) exams, umbilicus/ bladder Dairy Cows - liver Equine– abdominal Sheep and Goat - pregnancy transabdominal exam Dogs- abdominal for large dogs	-depth settings 20.8 for sheep and goat pregnancy
 **6.5 MHz C20 Micro-convex**	- 5.0 to 9.0 MHz - scanning depth 4 to 16 cm	Equine– abdominal - foals Sheep and Goat - pregnancy transabdominal (3.5 MHz is better) Dogs & Cats- abdominal and thoracic exams	-very useful probe for small animals
 **7.5 MHz L40 T-Handle Linear**	- 5.0 to 9.0 MHz - scanning depth 4 to 16 cm	Equine– tendons Small Dogs & Cats- abdominal and thoracic exams	-consider using a standoff for equine tendons -useful for cat bladders

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Viewing Devices

Note: All viewing devices have different levels of brightness that need to be adjusted for ambient light and type of examination. Please be familiarize yourself with the features and settings for viewing devices. See Flexx Operator's Manual for instructions.

Device	Settings	Accessories	Applications
Flexx Built in Monitor 	Brightness 50 to 100 Use (80 to 90) Contrast 50 to 100 Use (60 to 75) Adjust for Ambient Light	**Sunshade Carry Bag with Ram Mounts Adapter** 	Beef - Mount in Sunshade Carry Bag at the chute using Ram Mounts Kit Equine - Place in Stand or Mount in Sunshade Carry Bag at the stocks using Ram Mounts Kit Dogs and Cats - Place in Stand or mount with corner brackets on IV stand, etc
Vista Goggles 	- VGA input - Preset Brightness and Contrast - Pug in LEMO connector and start scanning	**3 head mounting configurations paired with Waist Strap Carry Bag** 	Dairy - use with Vista Goggles in Waist Strap Carry Bag Beef - use with Vista Goggles in Waist Strap Carry Bag
ReproScan 2.0 Wireless Monitor 	Brightness 50 to 100 Use (80 to 90) Backlight 50 to 100 Use (80 to 90) Contrast 50 to 100 Use (60 to 75) Adjust for Ambient Light	**Sunshade Carry Bag with Ram Mounts Adapter** 	Beef - excellent device to hang up at the chute. Use wirelessly or direct wired. Dairy - use for teaching tool with students Equine - very convenient to use the wireless feature

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Beef Cattle

4.0 MHz C60 Convex Rectal

Regular or Shorty ReproArm

Settings	Early Pregnancy	Mid-Gestation Pregnancy	Late Pregnancy	Comments and Tips
Depth Setting	12 cm	15 cm	20.8 cm	Consider using a ReproArm
Focus	50 mm	70 mm	110 mm	Move focus down for later pregnancies
Gain	90 - 110	100—115	105 - 120	Increased Gain gives increased brightness but lower resolution
IP	2 or 3	2	1 to 3	IP 3 for better resolution, IP 1 is brighter
Frequency	5.0	4.0	2.5	20 mm = 2 cm grid = easier to age with

6.5 MHz L64 Linear Rectal

Settings	Early Preg 28 to 42 days	Fetal Gender Determination	Ovarian Examination	Comments and Tips
Depth Setting	8 cm	8 or 9 cm	7 or 8 cm	
Focus	20 mm	30 to 40 mm	20 mm	
Gain	90 - 110	100—115	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	2	2 to 3	IP 3 for better resolution, IP 2 is brighter, use IP2 with Vistas
Frequency	5.5	4.0	4.0-5.5	20 mm = 2 cm grid = easier to estimate size

3.5 MHz C60 Convex T-Handle

Settings	Calf Thoracic	Cow Thoracic	Umbilicus	Abdominal	Comments and Tips
Depth Setting	10-12 cm	12-15	12-15 cm	10 cm	
Focus	40 mm	70-90mm	70 mm	40 mm	Don't forget that ultrasound cannot read through air/
Gain	90 - 110	90-100	90-100	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	2	2	2 to 3	IP 3 for better resolution, IP 2 is brighter, use IP2 with
Frequency	4.0	2.5			

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Dairy Cattle

Regular, Superbend, Shorty or Kiwi

6.5 MHz L64 Linear Rectal

Settings	Early Preg 28 to 42 days	Fetal Gender Determination	Ovarian Examination	Comments and Tips
Depth Setting	8 cm	8 or 9 cm	7 or 8 cm	
Focus	20 mm	30 to 40 mm	20 mm	
Gain	90 - 110	100—115	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	2	2 to 3	IP 3 for better resolution, IP 2 is brighter, use IP2 with Vistas
Frequency	4-5.5	4.0	4-5.5	20 mm = 2 cm grid = easier to estimate size

4.0 MHz C60 Convex Rectal

Settings	Early Pregnancy	Seasonal Dairy Pregnancy	Late Pregnancy	Comments and Tips
Depth Setting	12 cm	15 cm	20.8 cm	Consider using a ReproArm for dairy heifers and seasonal dairies
Focus	50 mm	70 mm	110 mm	Change depth and focus point for later pregnancies
Gain	90 - 110	100—115	105 - 120	Increased Gain gives increased brightness but lower resolution
IP	2 or 3	2	1 to 3	IP 3 for better resolution, IP 1 is brighter
Frequency	4-5.0	4.0	2.5	20 mm = 2 cm grid = easier to age with

3.5 MHz C60 Convex T-Handle

Settings	Calf Thoracic	Cow Thoracic	Umbilicus	Abdominal	Comments and Tips
Depth Setting	10-12 cm	12-15	12-15cm	10 cm	
Focus	40 mm	70-90mm	40-70 mm	40 mm	Don't forget that ultrasounds cannot read through gas/air
Gain	90 - 110	90-100	90-110	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	2	2	2 to 3	IP 3 for better resolution, IP 2 is brighter, use IP2 with Vistas
Frequency	4	2.5			

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Equine

6.5 MHz L64 Linear Rectal

Settings	Early Preg 14 to 40 days	Fetal Gender Determination	Ovarian Examination	Comments and Tips
Depth Setting	8 cm	8 or 9 cm	7 or 8 cm	IP 3 for better resolution, IP 2 is brighter, use IP2 with Vistas
Focus	20 mm	30 to 40 mm	20 mm	This probe can be used for the SI joint : 2 mhz, 3 frame, 46 comp
Gain	90 - 110	100—115	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	2	2 to 3	
Frequency	5.5	4-5.5	4-5.5	Use Freeze and Measure for More Accuracy

3.5 MHz C60 Convex Rectal

Settings	Foal Thoracic	Horse Thoracic	Umbilicus	Abdominal	Comments and Tips
Depth Setting	10 cm	15 cm	10 cm	10 to 20.8 cm	Use deeper setting for mature horse colic examination
Focus	40 mm	80 mm	30 to 40 mm	40 to 110 mm	For pregnancy: Angle cranially for heavier bred, caudally for shorter bred
Gain	90 - 110		100—115	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	1-2	2	2 to 3	IP 3 for better resolution, IP 2 is brighter
					For SI joints this probe works rectal. *frame 3, gain 90

7.5 MHz L40 Linear T-Handle

Settings	Flexor Tendon		Stifle	Comments and Tips
Depth Setting	3.9 cm	.8	.052	Shallow Focus, consider increasing your frequency
Focus	20 mm	5-10mm	.013	You may wish to use a standoff especially below fetlock
Gain	90 - 110	115-120	100	Hocks lower frequency and increase dynamic
IP	3		2	Higher up on the leg increase focus (~8) depth 10-12
Frequency	7.5	7.5	7.5	For Tendon Exams Frame of 3 is preferred

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3.5 MHz C60 Convex T-Handle

Sheep

Examination	Pregnancy Testing			Comments and Tips
Depth Setting	20.8 cm			Pregnancy test at 75 to 85 days after introduction of rams.
Focus	11 cm			This is the best time to find multiples.
Gain	90 - 120			Check each side of udder to find multiples.
IP	2			Use grid for aging
Grid	No grid			Use 2-2.5 frequency for deeper penetration

3.5 MHz C60 Convex T-Handle

Goats

Examination	Pregnancy Testing			Comments and Tips
Depth Setting	20.8 cm			Pregnancy test at 75 to 85 days after introduction of billies.
Focus	11 cm			This is the best time to find multiples.
Gain	90 - 120			Watch for pseudo-pregnancy before day 45.
IP	2			
Grid	No grid			

3.5 MHz C60 Convex T-Handle

Pigs

Examination	Pregnancy Testing			Comments and Tips
Depth Setting	20.8 cm			Pregnancy test at 21 to 24 days after breeding.
Focus	11 cm			
Gain	90 - 120			
IP	2			
Grid	No grid			

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Companion Animals

6.5 MHz C20 Micro-Convex

Settings	Bladder	Pregnancy	Ascites	Comments and Tips
Depth Setting	8 cm	8 or 9 cm	7 or 8 cm	Most popular probe in small animal medicine
Focus	40 mm	20 to 40 mm	20 mm	
Gain	90 - 110	100—115	105 - 120	Adjust Overall, Near and Far Gain to optimize image resolution
IP	2 or 3	2	2 to 3	IP 3 for better resolution, IP 2 is brighter
Grid	20 mm	20 mm	20 mm	Freeze, store and send images for medical records

3.5 MHz C60 Convex T-Handle

Settings	Abdominal			Comments and Tips
Depth Setting	10 cm			Use this probe for large dog abdominal exams
Focus	40 mm			
Gain	90 - 110			
IP	2 or 3			

7.5 MHz L40 Linear T-Handle

Settings	Bladder			Comments and Tips
Depth Setting	8 cm			Good probe for cat bladders and small dogs
Focus	50 mm			
Gain	90 - 110			
IP	2 or 3			
Grid	20 mm			

Flexx Applications Guide

Share your finding with other Flexx users!

The Flexx is a multi-probe multi-species ultrasound unit that has been designed with you, the mixed animal practitioner in mind. Please share your successful (and unsuccessful) settings, techniques and other tips with your colleagues. Email any suggestions that you may have to **inquiry@repro-scan.com** and we'll share these in our Flexx newsletters.

Look below for more references and don't forget we are always updating Facebook page and our newsletters with more info.

- Flexx User's Manual for more technical info and settings
- Facebook @ReproScan
- Sign up for our newsletter by emailing marketing@repro-scan.com or by filling out the contact form on the website and commenting that you want to be on the newsletter list.
- YouTube Channel: www.youtube.com/reproscancows
- Call the ReproScan office—we are here to help! 877-890-2411

Thank you for your business! We hope you enjoy your ReproScan!

Thanks from the ReproScan Team!