



## *Qualas***4**

### **Class 4 Diode Laser System**

## **Laser Therapy Protocol - Small Animals**




**Konftec Corporation**




12F-7, No. 77, Sec. 1, Sintai 5th Rd.  
Sijhih District, New Taipei City 221  
Taiwan








**[www.konftec.com](http://www.konftec.com)**




TEL: 886-2-8698-2148  
FAX: 886-2-8698-2149




After Surgery			Qualas4 (Red Laser 635nm)			
3+2+1 = Three treatments the first week, two the second, and one the third						
Indication	Frequency	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 1W  List: <b>1W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
						
			Ø30mm	Ø50mm	Ø30mm	
Abscess Incision	1/day for 4~5 days	8	17	37	45	
Drainage and Flush Abscess	1/day for 5~6 days	8	17	37	45	with Cellulitis, Incision, Drainage, and Flush
Amputation	Immediate, Post Surg 1x	8	17	37	45	Acute pain 2-3 days
Aural Hematoma(Post Surgery)	1/day	6	13	27	34	Acute inflammation 1x Immobilize ear, treat cause
Cystotomy	During surgery	8	17	37	45	Maintenance as needed
Degloving Wounds	1/day for 3~5 days	8	17	37	45	then 2~3/week until healed
Dewclaw Removal	Immediately post-op	8	17	37	45	
Dorsolateral Hemilaminectomy	Immediately post-op	8	17	37	45	then 2~3x more
Enterotomy	During surgery	8	17	37	45	or 3+2+1
Feline Declaw	Immediately post-op	6	13	27	34	Also next day if in hospital
Femoral Head Osteotomy	Immediately post-op	6	13	27	34	Also next day if in hospital
FLUTD(Feline Lower Urinary Tract Disease) - Blocked Urethra	1x to relieve blockage	6	13	27	34	3+2+1 for cystitis if needed
Fractures - After Surgery	2~3/week or 3+2+1	8	17	37	45	
Hernia Repair	2~3/week or 3+2+1	10	21	46	56	(Not a substitute for cleaning)
Orchiectomy Canine and Feline	Immediately post-op 1x	8	17	37	45	
Ovariohysterectomy Canine and Feline	Immediately post-op 1x	10	21	46	56	
Stifle Surgery - TPLO/TTA	3+2+1	8	17	37	45	




Burns, Ulcers, Bite, Wound			Qualas4 (Red Laser 635nm)			
Indication	Frequency	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 1W  List: <b>1W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
						
			Ø30mm	Ø50mm	Ø30mm	
Burns	1/day for 3~5 days	8	17	37	45	then 2~3/week until healed
Decubital Ulcers	1/day for 3~5 days	6	13	27	34	then 2~3/week until healed
Wounds	3~5/day	10	21	46	56	Decrease treatments as healing progresses
Feline Acne	Post surgical 1x	6	13	27	34	Be careful of thyroid
Insect Bite/Snake Bite	1x, may need 3+2+1	6	13	27	34	1~3x, depending on bite severity
Feline Tail Pull injuries	2~3/week or 3+2+1	6	13	27	34	




Gingivitis, Periodontal Diseases, Stomatitis			Qualas4 (Red Laser 635nm)			
3+2+1 = Three treatments the first week, two the second, and one the third						
Indication	Frequency	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)		Notes  Laser Power: 0.5 ~ 1W  List: <b>1W</b>	
			Fiber Rod	Len (Disp.)		
						
			Ø8mm	Ø30mm		
Gingivitis	2~3x, based on severity	6	3	34		
Periodontal Diseases	2~3/week or 3+2+1	6	3	34	Determine acute or chronic	
Stomatitis	Daily (Depends how chronic)	6	3	34	also use 3+2+1 (6~12 treatments, then maintenance)	




Pododermatitis, Otitis, Infections			Qualas4 (Red Laser 635nm)			
3+2+1 = Three treatments the first week, two the second, and one the third						
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
						Laser Power: 0.5 ~ 1W  List: <b>1W</b>
			Ø30mm	Ø50mm	Ø30mm	
Allergic Pododermatitis	2~3/week or 3+2+1	6	13	27	<b>34</b>	
Lick Granulomas	1/day	6	13	27	<b>34</b>	2~3/week or 3+2+1
Vasculitis - Non-infectious	2~3/week or 3+2+1	10	21	46	<b>56</b>	Be careful of possible thrombosis
Otitis - Acute	2~3/week or 3+2+1	10	21	46	<b>56</b>	
Otitis Media / External - Chronic	2~3/week or 3+2+1	6	13	27	<b>34</b>	then once every 3~4 weeks
Otitis External - w/ Infection	2~3/week or 3+2+1	10	21	46	<b>56</b>	
Staph Infections - Local	2/week	6	13	27	<b>34</b>	
Sterile Pyogranulomatous Syndrome pyogranuloma / granuloma	Daily for 2~3x, then 2~3/week	6	13	27	<b>34</b>	




Acupuncture, Trigger Point			Qualas4 (Red Laser 635nm) or (Infrared Laser 808nm)				
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes	
			Fiber Rod				
							
			Ø8mm	Ø8mm	Ø4mm	Laser Power: 0.5 ~ 12W  List: <b>0.5W</b>	
Acupuncture	3/week	3	<b>4</b>	<b>4</b>	2		Repeat every 2 days until disappearance of reactivity
Trigger Point	3/week	3	<b>4</b>	<b>4</b>	2		Repeat every 2 days until disappearance of reactivity




Pain, Tear, Edema, Lesions			Qualas4 (Infrared Laser 808nm/980nm)			
<b>3+2+1 = Three treatments the first week, two the second, and one the third</b>						
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 12W  List: <b>3W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Anal Sacculitis / Acute	2~3/week or 3+2+1	8	6	12	15	
Anal Sacculitis / Chronic	2~3/week or 3+2+1	6	4	9	11	
Anterior Cruciate Ligament Tear - Chronic	2/week	6	4	9	11	
Anterior Cruciate Ligament Tear, Full - Acute	3+2+1	8	6	12	15	
Anterior Cruciate Ligament Tear, Partial - Acute	3/week	8	6	12	15	1~3/week for 3 weeks. Exercise restriction
Cauda Equina Syndrome	3+2+1	10	7	15	18	1 treatment every 2~4 weeks
Cystitis/Interstitial	3+2+1	8	6	12	15	
Cystitis/Urethritis/Feline Lower Urinary Tract Disease	3+2+1	8	6	12	15	1 treatment every 2~4 weeks
Edema	1~2x	10	7	15	18	
Hot Spots	3+2+1	10	7	15	18	
Inflammatory Bowel Disease	2~3/week or 3+2+1	10	7	15	18	
Intra-abdominal	1x during Surgery	10	7	15	18	
Lesions	2~3/week or 3+2+1	8	6	12	15	
Luxating Patella	3+2+1	10	7	15	18	
Musculoskeletal Pain	1~3x, once daily	10	7	15	18	
Myofascial Pain	2~3/week or 3+2+1	10	7	15	18	




Arthritic, Joint, Hip, Disc			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 12W  List: <b>3W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Degenerative Joint Disease	2~3/week or 3+2+1	10	7	15	18	1 treatment every 2~4 weeks
Joint Injury - Acute	1/day for 6 days	16	11	24	29	
Hip Dysplasia	2~3/week or 3+2+1	10	7	15	18	
Degenerative Disc Disease	1/day for 3~5 days	10	7	15	18	then 2~3/week
Intervertebral Disc Disease	2~3/week or 3+2+1	16	11	24	29	




Nerve Regeneration, Neuropathies, Tendon, Ligament			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 12W  List: <b>3W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Perianal Fistulas	1/day for 3~5 days	6	4	9	11	then 2~3/week
Tendon & Ligament Injury	2~3/week or 3+2+1	10	7	15	18	
Tightrope/Extracapsular	3+2+1	10	7	15	18	
Traumatic & Overuse Injuries	2~3/week or 3+2+1	10	7	15	18	




Pain, Tear, Edema, Lesions			Qualas4 (Infrared Laser 808nm/980nm)			
3+2+1 = Three treatments the first week, two the second, and one the third						
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 12W  List: <b>6W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Anal Sacculitis / Acute	2~3/week or 3+2+1	8	3	6	7	
Anal Sacculitis / Chronic	2~3/week or 3+2+1	6	2	5	6	
Anterior Cruciate Ligament Tear - Chronic	2/week	6	2	5	6	
Anterior Cruciate Ligament Tear, Full - Acute	3+2+1	8	3	6	7	
Anterior Cruciate Ligament Tear, Partial - Acute	3/week	8	3	6	7	1~3/week for 3 weeks. Exercise restriction
Cauda Equina Syndrome	3+2+1	10	4	8	9	1 treatment every 2~4 weeks
Cystitis/Interstitial	3+2+1	8	3	6	7	
Cystitis/Urethritis/Feline Lower Urinary Tract Disease	3+2+1	8	3	6	7	1 treatment every 2~4 weeks
Edema	1~2x	10	4	8	9	
Hot Spots	3+2+1	10	4	8	9	
Inflammatory Bowel Disease	2~3/week or 3+2+1	10	4	8	9	
Intra-abdominal	1x during Surgery	10	4	8	9	
Lesions	2~3/week or 3+2+1	8	3	6	7	
Luxating Patella	3+2+1	10	4	8	9	
Musculoskeletal Pain	1~3x, once daily	10	4	8	9	
Myofascial Pain	2~3/week or 3+2+1	10	4	8	9	




Arthritic, Joint, Hip, Disc			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 12W  List: <b>6W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Degenerative Joint Disease	2~3/week or 3+2+1	10	4	8	9	1 treatment every 2~4 weeks
Joint Injury - Acute	1/day for 6 days	16	6	13	15	
Hip Dysplasia	2~3/week or 3+2+1	10	4	8	9	
Degenerative Disc Disease	1/day for 3~5 days	10	4	8	9	then 2~3/week
Intervertebral Disc Disease	2~3/week or 3+2+1	16	6	13	15	




Nerve Regeneration, Neuropathies, Tendon, Ligament			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes  Laser Power: 0.5 ~ 12W  List: <b>6W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Perianal Fistulas	1/day for 3~5 days	6	2	5	6	then 2~3/week
Tendon & Ligament Injury	2~3/week or 3+2+1	10	4	8	9	
Tightrope/Extracapsular	3+2+1	10	4	8	9	
Traumatic & Overuse Injuries	2~3/week or 3+2+1	10	4	8	9	




Pain, Tear, Edema, Lesions			Qualas4 (Infrared Laser 808nm/980nm)			
3+2+1 = Three treatments the first week, two the second, and one the third						
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes Laser Power: 0.5 ~ 12W  List: <b>9W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Anal Sacculitis / Acute	2~3/week or 3+2+1	8	2	4	5	
Anal Sacculitis / Chronic	2~3/week or 3+2+1	6	2	3	4	
Anterior Cruciate Ligament Tear - Chronic	2/week	6	2	3	4	
Anterior Cruciate Ligament Tear, Full - Acute	3+2+1	8	2	4	5	
Anterior Cruciate Ligament Tear, Partial - Acute	3/week	8	2	4	5	1~3/week for 3 weeks. Exercise restriction
Cauda Equina Syndrome	3+2+1	10	3	5	6	1 treatment every 2~4 weeks
Cystitis/Interstitial	3+2+1	8	2	4	5	
Cystitis/Urethritis/Feline Lower Urinary Tract Disease	3+2+1	8	2	4	5	1 treatment every 2~4 weeks
Edema	1~2x	10	3	5	6	
Hot Spots	3+2+1	10	3	5	6	
Inflammatory Bowel Disease	2~3/week or 3+2+1	10	3	5	6	
Intra-abdominal	1x during Surgery	10	3	5	6	
Lesions	2~3/week or 3+2+1	8	2	4	5	
Luxating Patella	3+2+1	10	3	5	6	
Musculoskeletal Pain	1~3x, once daily	10	3	5	6	
Myofascial Pain	2~3/week or 3+2+1	10	3	5	6	

Arthritic, Joint, Hip, Disc			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes Laser Power: 0.5 ~ 12W  List: <b>9W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Degenerative Joint Disease	2~3/week or 3+2+1	10	3	5	6	1 treatment every 2~4 weeks
Joint Injury - Acute	1/day for 6 days	16	4	8	10	
Hip Dysplasia	2~3/week or 3+2+1	10	3	5	6	
Degenerative Disc Disease	1/day for 3~5 days	10	3	5	6	then 2~3/week
Intervertebral Disc Disease	2~3/week or 3+2+1	16	4	8	10	





Nerve Regeneration, Neuropathies, Tendon, Ligament			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes Laser Power: 0.5 ~ 12W  List: <b>9W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Perianal Fistulas	1/day for 3~5 days	6	2	3	4	then 2~3/week
Tendon & Ligament Injury	2~3/week or 3+2+1	10	3	5	6	
Tightrope/Extracapsular	3+2+1	10	3	5	6	
Traumatic & Overuse Injuries	2~3/week or 3+2+1	10	3	5	6	

Pain, Tear, Edema, Lesions			Qualas4 (Infrared Laser 808nm/980nm)			
3+2+1 = Three treatments the first week, two the second, and one the third						
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes Laser Power: 0.5 ~ 12W  List: <b>12W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Anal Sacculitis / Acute	2~3/week or 3+2+1	8	2	3	4	
Anal Sacculitis / Chronic	2~3/week or 3+2+1	6	1	2	3	
Anterior Cruciate Ligament Tear - Chronic	2/week	6	1	2	3	
Anterior Cruciate Ligament Tear, Full - Acute	3+2+1	8	2	3	4	
Anterior Cruciate Ligament Tear, Partial - Acute	3/week	8	2	3	4	1~3/week for 3 weeks. Exercise restriction
Cauda Equina Syndrome	3+2+1	10	2	4	5	1 treatment every 2~4 weeks
Cystitis/Interstitial	3+2+1	8	2	3	4	
Cystitis/Urethritis/Feline Lower Urinary Tract Disease	3+2+1	8	2	3	4	1 treatment every 2~4 weeks
Edema	1~2x	10	2	4	5	
Hot Spots	3+2+1	10	2	4	5	
Inflammatory Bowel Disease	2~3/week or 3+2+1	10	2	4	5	
Intra-abdominal	1x during Surgery	10	2	4	5	
Lesions	2~3/week or 3+2+1	8	2	3	4	
Luxating Patella	3+2+1	10	2	4	5	
Musculoskeletal Pain	1~3x, once daily	10	2	4	5	
Myofascial Pain	2~3/week or 3+2+1	10	2	4	5	

Arthritic, Joint, Hip, Disc			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes Laser Power: 0.5 ~ 12W  List: <b>12W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Degenerative Joint Disease	2~3/week or 3+2+1	10	2	4	5	1 treatment every 2~4 weeks
Joint Injury - Acute	1/day for 6 days	16	3	6	7	
Hip Dysplasia	2~3/week or 3+2+1	10	2	4	5	
Degenerative Disc Disease	1/day for 3~5 days	10	2	4	5	then 2~3/week
Intervertebral Disc Disease	2~3/week or 3+2+1	16	3	6	7	

Nerve Regeneration, Neuropathies, Tendon, Ligament			Qualas4 (Infrared Laser 808nm/980nm)			
Indication	Indication	Dose (J/cm <sup>2</sup> )	Therapy Time (sec.)			Notes Laser Power: 0.5 ~ 12W  List: <b>12W</b>
			Ball (Focus)		Len (Disp.)	
			<2cm <sup>2</sup>	<4cm <sup>2</sup>	>5cm <sup>2</sup>	
			 Ø30mm	 Ø50mm	 Ø30mm	
Perianal Fistulas	1/day for 3~5 days	6	1	2	3	then 2~3/week
Tendon & Ligament Injury	2~3/week or 3+2+1	10	2	4	5	
Tightrope/Extracapsular	3+2+1	10	2	4	5	
Traumatic & Overuse Injuries	2~3/week or 3+2+1	10	2	4	5	

## Simplified Therapy Protocol

Indication	Wavelength- Power	Optic Cap & Fiber Rod	Treatment Time		Therapy Protocol
After Surgery Burns, Ulcers, Bite, Wound Gingivitis Periodontal Diseases Stomatitis	635nm-1W	Len 5cm <sup>2</sup> 	12 sec. x Area(cm <sup>2</sup> )		1) Est. Treatment Area 2) Cal. Treatment Time : 12 sec. x Area 3) Non-contact Move & Scan; 2cm/sec.
Pododermatitis Otitis, Infections	635nm-1W	Fiber Rod 	5 sec.		★ Point Treatment ★ Contact or Non-contact
Acupuncture Trigger Point	635nm-0.5W or 808nm-0.5W	Fiber Rod 	5 sec.		★ Point Treatment ★ Contact
Pain, Tear, Edema, Lesions Arthritic, Joint, Hip, Disc Nerve Regeneration Neuropathies Tendon, Ligament	808nm-12W	Ball 4cm <sup>2</sup> 	Tissue Depth	Treatment Time	1) Est. Treatment Area 2) Cal. Treatment Time by Tissue Depth 3) Contact & Move; Speed: 2cm/sec.
			0 cm	1 sec. x Area(cm <sup>2</sup> )	
			1 cm	3 sec. x Area(cm <sup>2</sup> )	
			2 cm	5 sec. x Area(cm <sup>2</sup> )	
			3 cm	15 sec. x Area(cm <sup>2</sup> )	
			4 cm	30 sec. x Area(cm <sup>2</sup> )	
			5 cm	1 min. x Area(cm <sup>2</sup> )	
6 cm	2 min. x Area(cm <sup>2</sup> )				