



HAGS HOUSE LIVE CHAT HELP SEARCH MEMBERS CALENDAR

Logged in as: FznYupr (Log Out)

My Controls · View New Posts · My Assistant · 1 New Messages



Hags House > Trail Camera & Video Game Camera Forums > Homemade Trail Camera

2 Pages ▾ 1 2 >

ADD REPLY NEW TOPIC

Focus of the ir Samsung., Without replacement of the glass.

Options ▾

tree sight

Dec 10 2005, 05:00 PM

Post #1



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370

Can this be done? I think it may. The samsungs focus is fixed with two steps of manual adjustment, normal and macro. When the focus ring on the outside is set to macro, this turns a ring on the inside that raises the lens assembly farther away from the ccd, compressing the springs against the screws that hold it in place. This lets you take a picture up close(.2 meter). After doing a ir mod I took a few pictures to see what they would look like, not good, but at one foot focus was good, as if it were on the macro setting. So I reasoned that if the lens assembly were to move closer to the ccd maybe the focus would improve. What I came up with was to remove the inside ring that adjust the focus settings. This lets the lens assembly rest on the ccd block inside the collar of which the focus ring was around.Took a few pictures to see what they would look like and not to bad. Focus look the be at a great distance but where we need it to be 5'-50' feet was still blurry. So I cut a paper washer shim to put distance back between the lens and ccd. This put me back to where I started from, up close about three feet this time, but the farther out I got the more I lost focus. So I made a thinner shim out of plastic film and the focus turned out pretty darn good if I do say so myself. This is just one cam but I do not see way it should'nt work on others. This is a rough guess but I would say my shim was between .002-.003 thousandth thickness of an inch, outside diameter was .5 inch by inside diameter .313 or 1/2 inch by 5/16. Other cams will probably vary in thickness of the shim. This will not require you to replace the ir cut filter you removed in the ir conversion with apiece of clear glass, and will let you adjust the focus to the proper distance for trail cam use. With shims of different thickness say .001 and .0015 the adjustment can be made by .0005 starting at .001, pretty fine I think. What do you think? How thin can a shim be made? What about shim material. If a metal shim were used and it some how became magnetized would this effect the picture recording. Copper or aluminum would not become magnetized but could bind easily and not lay flat. So would it be best to use plastic? It would be nice if one the members stores could supply us with some kind of shims. Here could be two places to start looking at. practishim.com aloma.com I would like to say in parting that I have learned alot from this place and feels pretty good to maybe give a little back once. This is the place for you cam builders, none better. hags house.GIF Have a merry christmas and a happy camming 2006.

Sorry guys I made an error on my shim measurement. Should of been 5/16 not 3/16 on the inside diameter. I have corrected it. I was going to take some test pics today but was kind of dark out and some moisture falling, will try again tomorrow. I have not posted a picture before, not sure I can figure out how. I will do my best, they will look good.

tree sight

This post has been edited by tree sight: Dec 11 2005, 06:34 PM

ON! CARD PM

REPORT MULTI + QUOTE TOP ↑

Dakota



Advanced Member



Group: Advanced Members

Posts: 252

Joined: 31-December 03

From: South Dakota

Member No.: 251

OFF CARD PM

tree sight



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370

Dec 10 2005, 09:55 PM

Post #2

This sounds great. How about a couple of your test pics after the conversion?

Thanks.....Mike



<http://www.hcoutfitters.com/Mike/GameCams.htm>

<http://community.webshots.com/user/mcbridemr>

REPORT MULTI + QUOTE TOP ↑

Dec 11 2005, 11:42 PM

Post #3

This first pic was taken with the cam flash only at 12', color enhanced a little to brighten it up a bit.

Attached thumbnail(s)



[ON!](#) [CARD](#) [PM](#)

[REPORT](#)

[MULTI +](#) [QUOTE](#) [TOP ↑](#)

tree sight

Dec 11 2005, 11:56 PM

Post #4



Same pic but with a little more done to it. I got some plastic sheets in the mail on saturday to make some shims out of and have worked with the cam a little today and I think I will be able to sharpen the focus a bit more than this. Remember this is without replacing the ir cut filter that is removed in the ir conversion, with clear glass. Focus is than adjusted with the shims.

Attached thumbnail(s)



[ON!](#) [CARD](#) [PM](#)

[REPORT](#)

[MULTI +](#) [QUOTE](#) [TOP ↑](#)

Pachanga

Dec 12 2005, 08:40 AM

Post #5



Member



Group: Members
 Posts: 47
 Joined: 20-January 05

Member No.: 1,450



tree sight



Advanced Member



Group: Advanced Members
 Posts: 280
 Joined: 12-February 04
 From: Missouri

Member No.: 370



tree sight



Advanced Member



I work with Optical Enginners as we do work for the Government and asking them what needs done to focus a unit after you remove the filter out of the camera. You need to move the ccd closer to the front lens 1/3 of the thickness of the glass that you have removed. EX. if your glass that you removed from the camera is .100" thick take $.100 \times .3333 = .0333$ ". What that means is you need to move the ccd closer to the front lens or visia versa by .033" Hope this helps



Dec 12 2005, 11:56 AM

Post #6

Pachanga,

Thank you for the tip. I cannot measure .0001" but I think this is close to what I am seeing. Did not even know it could be done this way but it works. Most cameras do not allow this movement, and the focus is done electrically, but the samsung is different. Your optical engineers could come in very handy here. I have a question for them or any one else for that matter. When a camera is made to see infared light and is then set to a special effects setting of sepia is there a ban in the visible spectrum that the sepia setting would be more sensative to. The camera probable does not work this way but what I am getting at is, if this would be possible and one was to make a filter to block visible light but would have a small peak at this ban of trasmission, one could then hide the flash say to 90% trasmission and the camera could still pick up this small peak of light, it could brighten up the night pics. This would hide the flash for the most part and help the weak flash of the camera, and possibly allow one to get by without a slave. Wishful thinking I know but run it by them sometime and see what they say and get back to me if you would. Thanks again for the tip.

tree sight

This post has been edited by tree sight: Dec 12 2005, 12:02 PM



Dec 13 2005, 12:07 AM

Post #7

Some more test pics after final focus has been done. This is about as good as I can get it to. Total shim thickness ended up being just .00175". I think that is right, man that looks small. Took one shim at .001 and one at .00075. Got the material at plactishim.com they were free samples. Can not beat that but I had to make my own with a hollow punch.

First picture is at ten' at 100 iso with a slave and filters, gddeans on the slave and elks on the cam. Just a 60 guide # for the slave. Editing has been done on these. I think sepia takes a brighter picture than black and white but than I also prefer a slight yellow tint over the green look. Red bad.

Group: Advanced Members
 Posts: 280
 Joined: 12-February 04
 From: Missouri

 Member No.: 370

This post has been edited by tree sight: Dec 13 2005, 12:09 AM

Attached thumbnail(s)



[ON!](#) [CARD](#) [PM](#)

[REPORT](#)

[MULTI +](#) [QUOTE](#) [TOP ↑](#)

tree sight

Dec 13 2005, 12:14 AM

Post #8

20' and 200 iso.



Advanced Member
 ■■■

Group: Advanced Members
 Posts: 280
 Joined: 12-February 04
 From: Missouri

 Member No.: 370

Attached thumbnail(s)



[ON!](#) [CARD](#) [PM](#)

[REPORT](#)

[MULTI +](#) [QUOTE](#) [TOP ↑](#)

tree sight

Dec 13 2005, 12:16 AM

Post #9



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370



tree sight



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370



tree sight

30' and 400 iso.

Attached thumbnail(s)



REPORT

MULTI +

QUOTE

TOP ↑

Dec 13 2005, 12:20 AM

Post #10

15' and 400 iso.

Attached thumbnail(s)



REPORT

MULTI +

QUOTE

TOP ↑

Dec 13 2005, 12:23 AM

Post #11



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370



tree sight



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

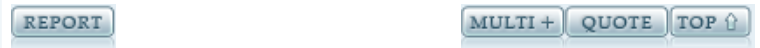
Member No.: 370



tree sight

15' and 200 iso.

Attached thumbnail(s)



Dec 13 2005, 12:32 AM

Post #12

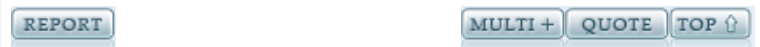
Looks like they lost some sharpness on the way there . Something I must be doing wrong. Should they loose quality?

Any how here are some pictures of what I am doing.

After I open it up and do the ir mod I remove the in side focus ring (left prong of tweezer) that goes around the collor of the ccd block.

This post has been edited by tree sight: Dec 13 2005, 12:41 AM

Attached thumbnail(s)



Dec 13 2005, 12:44 AM

Post #13



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370



tree sight



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370

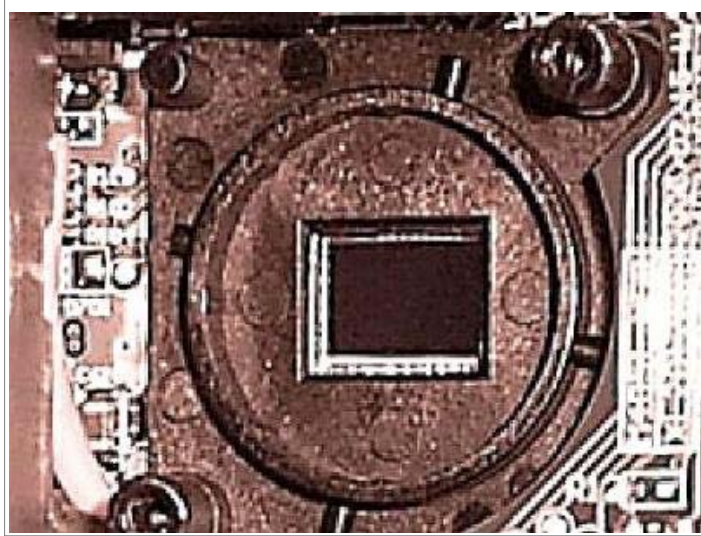


tree sight

CCD BLOCK and collar.

This post has been edited by tree sight: Dec 13 2005, 12:45 AM

Attached thumbnail(s)

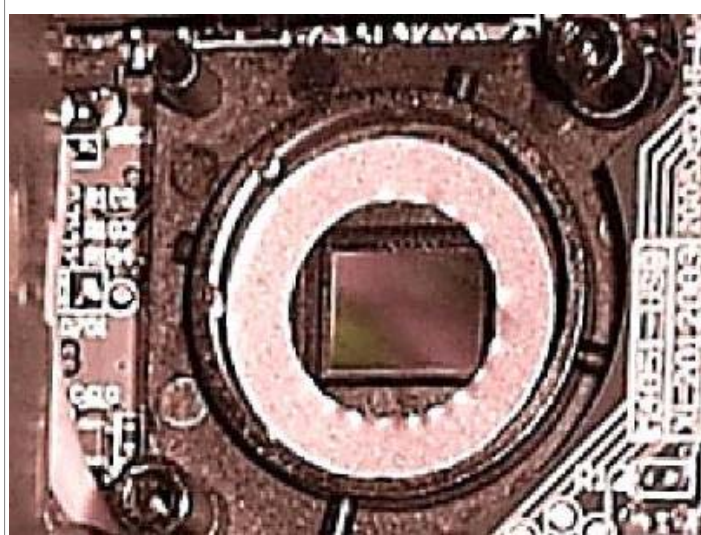


Dec 13 2005, 01:10 AM

Post #14

Then put your shims inside of the collar on the block face. Put every thing back together, then its trial and error until you find the correct shim thickness.

Attached thumbnail(s)



Dec 13 2005, 01:18 AM

Post #15



Been cloudy here the last few days, will post some day pics if the sun ever shines.

tree sight

Attached thumbnail(s)



[ON!](#) [CARD](#) [PM](#)

[REPORT](#)

[MULTI +](#) [QUOTE](#) [TOP ↑](#)

Enter Keywords

[Search Topic](#)

« Next Oldest · **Homemade Trail Camera** · Next Newest »

2 Pages ▾ | 1 | 2 | >

[FAST REPLY](#) [ADD REPLY](#) [NEW TOPIC](#)

1 User(s) are reading this topic (0 Guests and 0 Anonymous Users)

1 Members: [FznYupr](#)

[Go](#)

Invision Power Board v2.1.7 © 2006 IPS, Inc.
Licensed to: Hag's House

Skin by: [Dragonfly](#) © all rights reserved.

[Frosty \(3382\)](#) [English](#) [Lo-Fi Version](#) Time is now: 16th December 2006 - 10:44 AM



HAGS HOUSE LIVE CHAT HELP SEARCH MEMBERS CALENDAR

Logged in as: FznYupr (Log Out)

My Controls · View New Posts · My Assistant · 1 New Messages

Hags House > Trail Camera & Video Game Camera Forums > Homemade Trail Camera

2 Pages < 1 2

ADD REPLY NEW TOPIC

Focus of the ir Samsung., Without replacement of the glass.

Options

tree sight

Dec 13 2005, 05:32 PM

Post #16



Here is a day pic. These pics that Iam sending do not look as good as they did before they are sent, dont know what my problem is. No experience maybe. This has been edited. Tried to have multiple subjects to focus at different distances.

This post has been edited by tree sight: Dec 13 2005, 05:39 PM

Advanced Member

Group: Advanced Members
Posts: 280
Joined: 12-February 04
From: Missouri
Member No.: 370

Attached thumbnail(s)



ON! CARD PM

REPORT

MULTI + QUOTE TOP

tree sight

Dec 13 2005, 05:42 PM

Post #17



Advanced Member



Group: Advanced Members
Posts: 280
Joined: 12-February 04
From: Missouri

Member No.: 370



tree sight



Advanced Member



Group: Advanced Members
Posts: 280
Joined: 12-February 04
From: Missouri

Member No.: 370



tree sight

No editing.

Attached thumbnail(s)



Dec 13 2005, 05:44 PM

Post #18

Grayscale.

Attached thumbnail(s)



Dec 13 2005, 05:49 PM

Post #19



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

Member No.: 370



tree sight



Advanced Member



Group: Advanced Members

Posts: 280

Joined: 12-February 04

From: Missouri

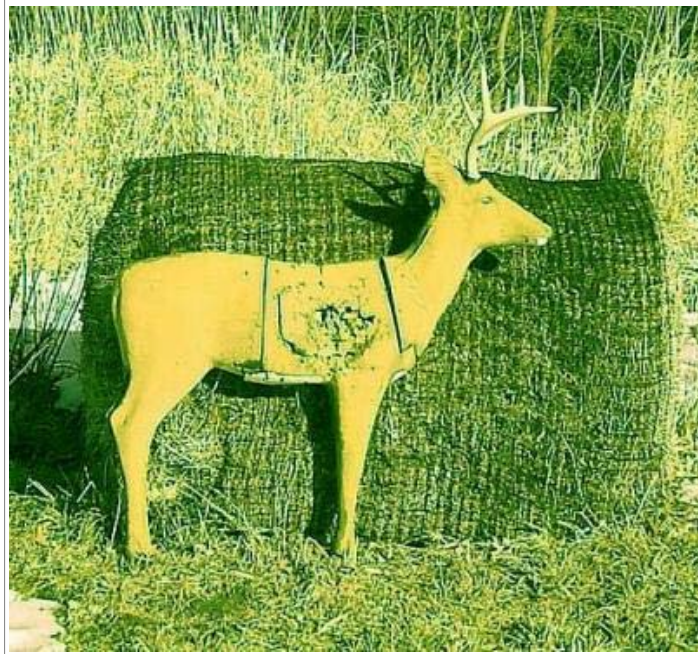
Member No.: 370



Hill Hopper

Tried to edit the color on this one. It is not right. 10' 100 iso.

Attached thumbnail(s)



Dec 13 2005, 06:16 PM

Post #20

I thought there would be more interest in this camera (more replies). With this focus technique I think it will work for you as well as a ir p41. Picture quality is not as good as the sony and you will need a slave most cases but if you can not get the focus on the sony just right , all you got is a bright blur. IMHO. Do'nt get on my pictures and the mods are not that hard. Give one a try. yessmiley.gif

tree sight



Dec 13 2005, 06:28 PM

Post #21



"First Leper in the Colony"



Group: Development Team Member
Posts: 5,955
Joined: 17-July 03
From: NW Arkansas

Member No.: 3



edshere



Advanced Member



Group: Members
Posts: 99
Joined: 22-September 05
From: Central Kansas

Member No.: 2,062



212



Advanced Member



Looks like your doing a good job! cheers.gif



Butch

Before you embark on a journey of revenge, dig two graves -Confucius

I'm an Engineer. Engineers build civilizations – I leave it to politicians to destroy them -
Melanie

Arkansas Deer Hunters Alliance Life Member - Contact me to Join



Dec 16 2005, 11:15 PM

Post #22

Tree Sight, So the final thickness was .00175". Is that correct? I may give it a whirl.



Dec 16 2005, 11:45 PM

Post #23

tree sight look at how many people looked at your post. We have been reading and watching your progress. Congratulations...it looks real good. Thank you for sharing cheers.gif



My opinion is my own and may not be the same as yours, we are both entitled to them .

The owner of this site is NOT responsible for what I say...I am!

Group: Development Team Member
 Posts: 5,018
 Joined: 3-November 03
 From: Lone Star State

Member No.: 215

ON! **CARD** **PM**

REPORT

MULTI + **QUOTE** **TOP ↑**

Dakota



Advanced Member

Group: Advanced Members
 Posts: 252
 Joined: 31-December 03
 From: South Dakota

Member No.: 251

OFF **CARD** **PM**

☐ Dec 17 2005, 08:23 AM

Post #24

Tree Sight,

I think you have done a great job. Thanks for posting the pics. I've got several cams waiting to be built but before the winter is over I definately plan on trying this. I would love it if one of the suppliers would supply the shims needed.

Can you send me a good night and day pic full size unedited? I'll resize it or link it to the site for others to see the clearer version. I think your loosing alot of detail in the posted pics.

Thanks,

Mike
 MikeMcBride@hur.midco.net



<http://www.hcoutfitters.com/Mike/GameCams.htm>
<http://community.webshots.com/user/mcbridemr>

REPORT

MULTI + **QUOTE** **TOP ↑**

treetop



Advanced Member

Group: Development Team Member
 Posts: 2,703
 Joined: 24-July 03

Member No.: 74

ON! **CARD** **PM**

☐ Dec 17 2005, 09:31 AM

Post #25

Treesight I agree thanks for all the hard work in getting the focus on the camera Awhile back i did one and it was pretty frustrating .I think you are going the right way with a shim versus glass A few others also were trying the same thing with glass and the one thing that came out was there are at least 3 completely different shutter/lens assemblys in different samsungs. The one I had done I thought I had gotten it pretty good then somehow the lens ended up scratched I have done ir mods to a 380, a few sonys and the samsung and it was by far the most difficult. I think it depends on which assembly is in your camera?



<http://www.huntingfootage.com/showgallery...when=&whenterm=>

REPORT

MULTI + **QUOTE** **TOP ↑**



Advanced Member



Group: Advanced Members
Posts: 280

Joined: 12-February 04
From: Missouri

Member No.: 370



tree sight



Advanced Member



Group: Advanced Members
Posts: 280

Joined: 12-February 04
From: Missouri

Member No.: 370

Dec 17 2005, 10:38 PM

Post #26

I guess I missed this this morning. Thanks for the replies.

Thanks for the seal of approval from HH. Must have this.

edshere a thickness of 0.00175" and 0.002" I could not tell a difference in but one more step of 0.00025"(+/-) you can. I did not think an adjustment this small would be needed but it does. I got my shim material from practishim.com. Also accutrex.co They call it color-coded plastic shim stock. I got free samples, three sheets 6"x24" of 0.0005",0.00075,and 0.001 thickness. There is a +/- 5% tolerance on the thickness. But each cam may take a different thickness.

Hope you stay with the slave project. It is greatly needed.

212, thanks for the encouragement, but most of those looks were me. biggrin.gif

Dakota, sent you two pics. Thank you for your help and interest. Let me know if you do not get these.

treetop, I have three cams and they are all the same, but I think the shim technique should work on all of them. But do'nt know that for sure. Might take a different size diameter shim but should work I would think.

tree sight

This post has been edited by **tree sight**: Dec 17 2005, 10:47 PM



Dec 19 2005, 01:32 AM

Post #27

Two more pictures. I think these will look like there, like they do here. Resolution is 2272x1704, 100 iso for the day pic and 200 iso for the night pic. Ten feet and no editing. Crop to as close to 640x480 as I could get them and then resize to that. Slave flash was a Vivitar 215, 60 guide # I think, with trails end filter on both slave and cam. Night pic is a little dark at 200 iso but is a bit sharper than 400 iso and can be lighten up with editing.

tree sight

Attached thumbnail(s)



ON! CARD PM

REPORT

MULTI + QUOTE TOP ↑

tree sight

Dec 19 2005, 01:38 AM

Post #28

Ok day pic looks good. Night pic next. Shim was 0.002" on both of these.

tree sight



Attached thumbnail(s)



ON! CARD PM

REPORT

MULTI + QUOTE TOP ↑

212

Dec 19 2005, 06:53 PM

Post #29



Wow! If I understand right...that these are cropped from the original picture, they are VERY GOOD coolsmiley.gif



My opinion is my own and may not be the same as yours, we are both entitled to them .

The owner of this site is NOT responsible for what I say...I am!

Advanced Member



Group: Development Team Member

Posts: 5,018

Joined: 3-November 03

From: Lone Star State

Member No.: 215



edshere

Dec 19 2005, 07:34 PM

Post #30



Tree Sight,
Great job, those look great and I plan on trying this after Christmas. Thanks for the help. coolsmiley.gif

Advanced Member



Group: Members

Posts: 99

Joined: 22-September 05

From: Central Kansas

Member No.: 2,062



Enter Keywords

Search Topic

« Next Oldest · **Homemade Trail Camera** · Next Newest »

2 Pages ▾ < 1 2



1 User(s) are reading this topic (0 Guests and 0 Anonymous Users)

1 Members: [EznYupr](#)

Search bar containing the text "-- Homemade Trail Camera" and a "Go" button.

Skin by: [Dragonfly](#) © all rights reserved.

Frosty (3382)

English

[Lo-Fi Version](#)

Time is now: 16th December 2006 - 10:45 AM