



**C A S S I N I <sup>TM</sup>**

**MODEL: CS-102**

**1100<sub>MM</sub> X 102<sub>MM</sub>**



**ASTRONOMICAL  
REFLECTOR TELESCOPE**

**COSMO BRANDS INC.  
WWW.COSMOSOPTICS.COM**



# CASSINI CS-102 OPERATING INSTRUCTIONS

## INTRODUCTION

THIS TELESCOPE HAS BEEN PRODUCED TO PRECISE SPECIFICATIONS.

PRIOR TO USING YOUR NEW CASSINI TELESCOPE, PLEASE READ THE FOLLOWING SETUP AND USAGE INSTRUCTIONS. IT IS IMPORTANT TO PROPERLY ASSEMBLE YOUR TELESCOPE IN ORDER TO ALLOW IT TO FUNCTION PROPERLY.

USE THE TELESCOPE FOR TERRESTRIAL (LAND) VIEWING BEFORE ATTEMPTING TO VIEW ASTRONOMICAL OBJECTS. THIS WILL FAMILIARIZE YOU WITH HOW POWERFUL EACH EYEPIECE WILL BE, AS WELL AS INTRODUCE YOU TO THE FUNCTIONS OF YOUR ACCESSORY LENSES.

THE IMAGE YOU SEE WILL BE UPSIDE DOWN AND BACKWARD. THIS IS DUE TO THE FACT THAT YOUR TELESCOPE IS AN ASTRONOMICAL TELESCOPE AND HAS BEEN MANUFACTURED FOR ASTRONOMICAL OBSERVATIONS.

FOR TERRESTRIAL VIEWING WE HAVE ADDED AN *ERECTING LENS* SO THAT WHEN YOU VIEW OBJECTS ON THE EARTH YOUR IMAGE WILL BE RIGHT SIDE UP.

WE RECOMMEND YOU BEGIN WITH THE LOWEST POWER EYEPIECE(20MM) WHEN USING YOUR TELESCOPE. AS YOU INCREASE THE POWER (6MM EYEPIECE) YOUR POWER WILL BE HIGHER, BUT THE IMAGE WILL APPEAR DARKER. THIS IS DUE TO THE BASIC PHYSICAL PROPERTIES OF THE TELESCOPE. THE HIGHER THE POWER YOU USE, THE DARKER THE IMAGE WILL APPEAR AND YOUR VIEWING FIELD WILL BE MORE NARROW.

PLEASE BE PATIENT WHEN USING YOUR TELESCOPE. IT IS A VERY SENSITIVE INSTRUMENT THAT IS CAPABLE OF USING HIGH POWER. HOWEVER, THE MORE POWER YOU USE, THE MORE SENSITIVE THE TELESCOPE BECOMES. AS A RESULT THE SLIGHTEST MOVEMENT OF THE TELESCOPE COULD CAUSE YOU TO LOSE THE IMAGE YOU HAVE IN YOUR EYEPIECE. PRACTICE WILL ENABLE YOU TO KNOW HOW MUCH MOVEMENT TO EXPECT WITH EACH EYEPIECE AND IT'S CORRESPONDING POWER.

NOTE: SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



## ACCESSORIES

A) MARS-EYE ELECTRONIC FINDER:

USED TO LOCATE OBJECTS PRIOR TO USING MAIN TELESCOPE.  
PLEASE NOTE YOU MUST ALIGN THE FINDER WITH THE MAIN  
TUBE PRIOR TO INITIAL ASTRONOMICAL OR TERRESTRIAL USE.



B) EYEPIECES:

6MM = 183X  
(MOST POWERFUL - LEAST LIGHT )  
20MM EYEPIECE = 55X  
LEAST POWERFUL - MOST LIGHT



C) 1.5X ERECTING LENS:

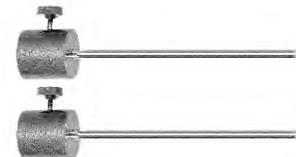
ALONG WITH THE 20MM OR 6MM LENS, THIS IS USED  
TO CONVERT THE UPSIDE DOWN, IMAGE TO RIGHT SIDE UP.



D) HELICAL RACK & PINION FOCUSING.  
ALLOWS FOR PRECISE FOCUSING.



E) TWO COUNTER BALANCE WEIGHT ASSEMBLY.



F) CASSINI PLANETARIUM CD-ROM

FROM ANY LOCATION YOU CAN SEE THE SKY AS IT APPEARS AT  
ANY TIME OF DAY, OR EVEN IN THE FUTURE,





## CS-102 TELESCOPE ASSEMBLY INSTRUCTIONS

CAUTION: VIEWING THE SUN WITH THIS TELESCOPE OR EVEN THE UNAIDED EYE CAN RESULT IN BLINDNESS OR OTHER SERIOUS EYE DAMAGE WHICH MAY BE PERMANENT. NEVER POINT YOUR TELESCOPE AT THE SUN

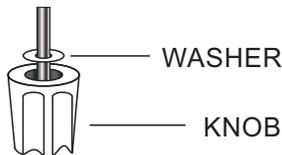
- 1 REMOVE ALL PARTS FROM BOX AND IDENTIFY THEM.

TELESCOPE W/MOUNT ATTACHED  
TRIPOD(PREASSEMBLED)  
COUNTER WEIGHT SHAFTS  
COUNTER WEIGHTS  
MARS-EYE FINDER  
EYEPIECES(20MM + 6MM)  
1.5 X ERECTING LENS  
ACCESSORY TRAY  
CD-ROM

2. EXTEND TRIPOD LEGS EQUALLY AND TIGHTEN LOCKING KNOBS.

3. ATTACH TELESCOPE + MOUNT TO TRIPOD AS SHOWN.  
(DO NOT OVER TIGHTEN)

NOTE : TENSION SPRING & WASHER  
LOCATED HERE



4. ATTACH ACCESSORY TRAY (AS SHOWN).

5. LOOSEN SCREW ON MARS-EYE FINDER AND SLIDE ONTO BRACKET. TIGHTEN ATTACHMENT SCREWS. ( PLEASE SEE FURTHER INSTRUCTIONS ON MARS-EYE FINDER).





6. BALANCE THE MAIN TUBE BY MOVING IT AS SHOWN

BALANCE MARK



7. BALANCE TELESCOPE BY MOVING THE COUNTER WEIGHTS AS SHOWN



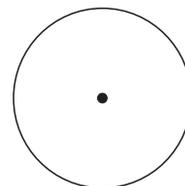
8. ATTACH THE SLOW-MOTION KNOB TO THE SHAFT OF SLOW-MOTION ON THE TRIPOD AS SHOWN



9. REMOVE CAPS WHEN TELESCOPE IS IN USE, AND REPLACE WHEN NOT IN USE. THIS WILL KEEP THE TELESCOPE'S OPTICS CLEAN.



10. THE COLLIMATION SPOT ON THE PRIMARY MIRROR IS FOR THE OPTICAL ALIGNMENT OF THE TELESCOPE, AND IS NOT A DEFECT.







## HOW TO USE EYEPIECES & ACCESSORIES

PROPER PLACEMENT OF THE EYEPIECES AND ACCESSORIES ARE IMPORTANT IN ORDER TO ASSURE EASY OPERATIONS AND CLEAR VIEWING.

PLEASE CONSIDER USING YOUR ACCESSORIES IN THE FOLLOWING ORDER. BY DOING THIS YOU WILL BETTER UNDERSTAND THE IMPACT EACH INDIVIDUAL ACCESSORY HAS ON THE FUNCTION OF YOUR TELESCOPE.

### 1. FOCUSING TUBE - TURN FOCUSING WHEELS

TOWARD THE TELESCOPE UNTIL IT WILL GO NO FURTHER. TO FOCUS BEGIN TO TURN THE FOCUSING KNOBS TOWARD YOUR BODY, SLOWLY, UNTIL THE IMAGE IS CLEAR. NOTE: YOU MUST HAVE AN EYEPIECE INSERTED IN ORDER TO VIEW IMAGE.



### 2. EYEPIECE INSERTION - INSERT AN EYEPIECE

INTO THE RECEIVING END OF THE FOCUSING TUBE. WE SUGGEST YOU ALWAYS BEGIN WITH THE LOWEST POWER EYEPIECE (20MM). THE LOWER THE NUMBER ON THE EYEPIECE, THE HIGHER THE POWER YOUR TELESCOPE WILL BE USING. ALSO AS YOU INCREASE YOUR POWER YOU WILL DECREASE THE FIELD OF VIEW AND THE BRIGHTNESS OF YOUR TELESCOPE. WE SUGGEST YOU ALWAYS USE THE LOWEST POWER REQUIRED TO VIEW YOUR SUBJECT.



### 3. 1.5X ERECTING LENS - INSERT THE ERECTING

LENS DIRECTLY INTO THE FOCUSING TUBE. THEN PLACE THE EYEPIECE INTO THE RECEIVING END OF THE ERECTING LENS





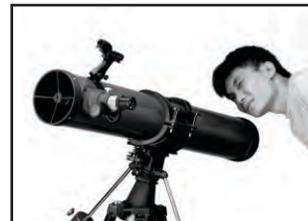
## MARS-EYE ELECTRONIC FINDER MOUNTING & ALIGNMENT

### **TO MOUNT:**

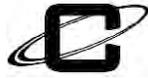
- 1) REMOVE MARS-EYE ELECTRONIC FINDER FROM BOX.
- 2) LOOSEN THUMB SCREWS ON SIDE OF FINDER AND SLIDE FINDER ONTO DOVETAIL MOUNT LOCATED AT TOP OF MAIN TELESCOPE TUBE.
- 3) TIGHTEN THUMB SCREWS.

### **TO CHECK ALIGNMENT WITH MAIN TELESCOPE:(IMPORTANT!)**

- 1) THE MARS-EYE ELECTRONIC FINDER IS NOT PRE-SET AT FACTORY. THE FOLLOWING WILL ALLOW YOU TO ADJUST THE ALIGNMENT.
- 2) DURING THE DAY LIGHT HOURS, AIM THE MAIN TELESCOPE AT AN OBJECT AT LEAST 1/4 MILE OR MORE IN THE DISTANCE AND BRING IT INTO FOCUS.(VERY IMPORTANT)
- 3) ONCE YOU HAVE CENTERED THE REFERENCE ITEM IN THE MAIN TUBE, TIGHTEN ALL KNOBS AND ADJUSTMENTS TO PREVENT ANY MOVEMENT.
- 4) REMOVE CIRCULAR BATTERY SAVER LOCATED BENEATH FRONT OF FINDER (BE SURE TO SAVE AND REPLACE THE BATTERY SAVER WHEN NOT IN USE.)
- 5) TURN FINDER ON BY SLIDING ON/OFF SWITCH FORWARD. ON/OFF SWITCH IS LOCATED ON THE RIGHT SIDE OF THE FINDER.
- 6) LOOK THROUGH THE FINDER AND LOCATE THE RED DOT.



- 7) IF THE OBJECT IN THE MARS-EYE FINDER IS NOT WHAT YOU SEE THROUGH THE MAIN TELESCOPE TUBE, ADJUSTMENT IS REQUIRED.
- 8) TO MOVE THE RED DOT UP AND DOWN, TURN THE ELEVATION SCREW LOCATED ON THE REAR BOTTOM OF THE FINDER TO HEIGHT REQUIRED.
- 9) TO MOVE THE RED DOT LEFT AND RIGHT, TURN THE WINDAGE SCREW LOCATED AT THE FRONT LEFT SIDE OF THE FINDER TO THE PROPER POSITION.
- 10) THESE ADJUSTMENTS WILL ALLOW YOU TO POSITION THE RED DOT ON THE SAME OBJECT CENTERED IN THE MAIN TELESCOPE.



## GETTING THE MOST FROM YOUR TELESCOPE

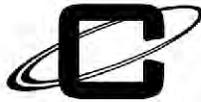
TAKE THE TIME TO BECOME FAMILIAR WITH YOUR NEW TELESCOPE. LEARN THE NAMES OF THE VARIOUS PARTS, WHERE THEY ARE LOCATED AND THEIR FUNCTION. IT IS BEST TO PERFORM THESE FUNCTIONS DURING THE DAY TIME.

WHEN SETTING UP FOR A VIEWING SESSION, PLACE THE TELESCOPE IN AN AREA SHELTERED FROM THE WIND IF POSSIBLE. THE BEST NIGHT TIME VIEWING WILL BE AWAY FROM CITY LIGHT AND WHEN THE ATMOSPHERE IS "STEADY".

WITH A LITTLE PRACTICE YOU WILL LEARN TO JUDGE WHEN VIEWING CONDITIONS ARE GOOD. LOOK FOR THE NIGHTS WHEN THE STARS SHINE BRIGHTLY WITH LITTLE OR NO TWINKLING.

USE LOW POWER TO TAKE ADVANTAGE OF THE WIDER FIELD OF VIEW AND BRIGHTER IMAGE. RESERVE YOUR HIGHER POWER FOR THOSE NIGHTS WHEN VIEWING CONDITIONS ALLOW FOR DETAILED OBSERVATIONS.





**C A S S I N I <sup>TM</sup>**

**CASSINI <sup>TM</sup> Limited One Year Warranty**

We guarantee to replace or, at our option, repair any products or parts thereof which are found defective in material or workmanship during the first year from date of purchase. Our obligation with respect to such products or parts shall be limited to replacement or repair. In no event shall we be liable for consequential or special damages or for transportation, installation, adjustment, or other expenses which may arise in connection with such product or parts. The customer shall be responsible for all costs of transportation and insurance, both to and from CASSINI/COSMO BRANDS INC., and shall be required to prepay such costs. No expenses, warranties and implied warranties, whether or not merchantability of fitness for any particular use or otherwise (except as to title) other than these expressly set forth above which are made in writing and signed by executive officer of our corporation.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES, IN NO EVENT SHALL THE MANUFACTURER OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER. BECAUSE SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF THE POSSIBILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

CASSINI <sup>TM</sup>

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IF YOU NEED ANY FURTHER HELP WITH YOUR CASSINI TELESCOPE  
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