

```

|----- MODULE HourClock -----|
|
| *****
| intr
| *****
|
| EXTENDS Naturals
| VARIABLE hr
| HCini  $\triangleq$  hr  $\in$  (1 .. 12)
| HCnext  $\triangleq$  hr' = IF hr  $\neq$  12 THEN hr + 1 ELSE 1
| HC  $\triangleq$  HCini  $\wedge$   $\Box[HCnext]_{hr}$ 
|
|-----|
| THEOREM HC  $\Rightarrow$   $\Box HCini$ 
|-----|

```